CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. 220 Broadway, New York, November 28, 1907.

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CONSTRUCTION NEWS.

PLANS AND SPECIFICATIONS ON FILE.

(denotes that this work is advertised in Engineering News.)*

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RAILWAYS.

(denotes that this work is advertised in Engineering News.)*

ABERDEEN & TOMBIGBEE.—Surveys for this road, which will extend from Okolona, Miss., to Pickinsville, Ala., 65 miles, via Woodson, Aberdeen, Lackey, Old Hamilton, Kaiola Springs and Columbus, Miss., have been completed and grading is finished between Okolona and Aberdeen, 17½ miles, and Columbus and Pickensville, 11½ miles. Of the total distance 59 miles are in Mississippi and six miles are in Alabama. The company is constructing this line with its own forces. The road is being built principally for lumber traffic. H. E. Reynolds, Pres., and W. T. McKee, Ch. Engr., both of Aberdeen, Miss. Noted on Oct. 24.

ALABAMA & MISSISSIPPI.—M. Lankford, Gen. Mgr., Vinegar Bend, Ala., announces that no construction has been done by his company since January, 1907, and that the proposed extensions are abandoned for the present.

BIRMINGHAM & SOUTHWESTERN MISSISSIPPI.—Preliminary arrangements for building this proposed road from Birmingham, Ala., to New Orleans, La., are not completed and no attempt to push the scheme will be made until financial conditions improve. This company was chartered in Alabama, Mississippi and Louisiana to build a line from Birmingham via Hattiesburg and Waynesboro, Miss., to Baton Rouge, La., with a branch from Waynesboro to Pascagoula. The incorporators are A. H. Longino, 503 Hooker St., Jackson, Miss.; J. J. Comer and A. J. Hackett, of New Orleans, and Jackson, Miss. Capital, $5,000,000.

CAIRO & KANAWHA VALLEY.—This company may build next year an extension of eight miles from Macfarlan to Smithville, W. Va. Company now operates 17 miles of line between Cairo and Macfarlan.

CANADIAN PACIFIC.—We are officially advised that the proposed line from Nanaimo to Alberni, Vancouver Island, B. C., is an extension of the Esquimalt & Nanaimo Ry., which is now in operation from Victoria to Wellington, 78 miles. The proposed extension extends from Wellington, five miles north of Nanaimo, to Alberni, a distance of 57 miles. Location surveys are completed. Alberni is on tide water Alberni Canal, an inlet from the Pacific Ocean. The summit to be crossed is 1,350 ft. above sea level, and the grades adopted are 1.5 per cent. compensated for curvature. Contracts for clearing right-of-way will be let Dec. 1, and it is expected to start on grading before completion of clearing. The whole country is heavily timbered with Douglas fir and cedar, which is expected to form a large traffic when road is completed. There are also large resources chiefly undeveloped in mineral and agricultural land.

Location surveys are also in progress for a railway from French Creek, 22 miles north of Wellington, to Campbell River, a distance of 70 miles. Location survey has been completed from Duncans to Cowichan Lake, 20 miles. R. Marpole, Vancouver, is Vice-Pres. and C. E. Cartwright, Vancouver, is Ch. Engr. A large blue-print of the southern districts of Vancouver Island, B. C., is on file at New York office of Engineering News, showing proposed branches from Wellington to Comox and Campbell River; from Englishmans River to Alberni; Alberni to Cumberland, and Duncans to Alberni.

CANANEA, YAQUI RIVER & PACIFIC.—It is officially announced that this railroad will be completed in advance of Nov. 6, 1912, which is the date set in the new concession granted by the Mexican Government for the formal opening of the road for business, according to the Boston "Transcript." There will be no diminishing of the construction forces on account of the financial stringency in the United States. During the recent visit to Mexico City of Epes Randolph, Pres. of the C., Y. R. & P., he conferred with the Government authorities and gave positive assurance that the road would be built according to the original plans. The closing down of many of the copper mines has enabled the contractors to obtain all the laborers for the work that they can use. More than 6,000 men are now employed in the several construction gangs. In addition to the main line extension from Guaymas, which will be about 850 miles long, more than 400 miles of branch line will be built. These branch lines will connect with the Southern Pacific at two points in Arizona. E. A. McFarland, Tucson, Ariz., is Ch. Engr.

EAST RIVER TERMINAL R. R.—Incorporated in Albany, N. Y., to build and operate a standard gage steam railroad, to be used exclusively for freight purposes, in the Borough of Brooklyn, New York City. The road is to begin at the East River, between North Third and North Fourth Sts., and to run thence easterly about half a mile to a point east of Wythe Ave., between North Third and North Fourth Sts. The capital stock is $10,000, consisting of shares of $100 each, and the directors are as follows: H. O. Havemeyer, Jr.; Horace Havemeyer, T. A. Havemeyer, B. E. Martin, J. H. McCafferty, H. K. Hilton, E. C. Porrer, Jr., of New York City; John Unger of Morristown, N. J., and William B. Duncan, Jr., of Port Washington, L. I. We are officialy advised that this company is doing its own construction work.

FLORIDA CENTRAL.—The Georgia Railroad Commission has granted permission to this company to issue $200,000 of bonds to secure funds for the proposed extension from Thomasville, Ga., to the Gulf of Mexico. J. L. Phillips is Pres., Thomasville, Ga. Z. Middlebrooks is Gen. Mgr. and Pur-Agt., Thomasville.

INTERNATIONAL & GREAT SOUTHERN.—Chartered in Oklahoma with $60,000,000 capital stock, to build a line from Joplin, Mo., via Weber Falls, Okla., to Galveston, Tex., with branch line from Weber Falls to Fort Worth, Tex., and to El Paso, Tex., a total of 2,000 miles. The incorporators are George Silsby, of Saginaw, Mich.; D. D. Klapp, M. H. Tennison, Henry Loop and John H. Surber, of Tecumseh, Okla.; L. E. Patterson, C. T. Williams and S. C. Glasgow, of Oklahoma City, Okla.

KANSAS, LAWTON & GULF.—Chartered in Oklahoma with a capital of $5,000,000 to build from the Kansas-Oklahoma state line through Oklahoma to a point on Red River, near Waurika. The line probably will pass through Taloga and Lawton, Okla. The incorporators are J. M. Bellamy, S. P. Thornhill, Charles G. Shane and Frank P. Cease, all of Lawton, Okla.; and A. J. Robinson, of Frederick, Okla. The incorporators named are identified with the Lawton, Wichita Falls & Northwestern Ry. Co. The latter company has awarded a contract to the STEBBINS & KIRKS CONSTRUCTION CO., Oklahoma City, Okla., to build a 7-mile section between Kell and Randlett, Okla. Noted on Nov. 7.

MANITOU INCLINE.—Incorporated in Colorado with a capital of $220,000 to build a second railway to the top of Pike's Peak. The line of the proposed road lies over Mount Manitou, and will be shorter than the present cog road. Construction will begin at once. The incorporators are N. N. Brumback of Denver, Colo., and Charles L. McKesson, C. W. Stiff, E. L. Whitney and Claude L. McKesson, of Colorado Springs, Colo.

OKLAHOMA, COLORADO & PACIFIC.—Chartered in Oklahoma with a capital of $18,000,000 to build from Oklahoma City, Okla., to Trinidad, Colo., 600 miles. The headquarters of the company will be at Oklahoma City. The incorporators are George Silsby, of Saginaw, Mich.; Edgar Turney of Turney, Okla.; O. T. Ladd, H. P. Ladd, L. E. Patterson and Hobart Huston, of Oklahoma City, Okla., and M. G. Wiley, of Guymon, Okla.

PACIFIC RAILWAY & NAVIGATION.—It is announced that an extension of time to Nov. 1, 1909, for the completion of this road between Buxton and Tillamook, Ore., 75 miles, has been granted by a citizens' committee of Tillamook, Ore., who held an agreement from the company in lieu of right-of-way concessions to complete the road by Dec. 31, 1908. The difficulty in securing funds recently necessitated the suspension of work. E. E. Lytle is Pres., and George L. Davis, Ch. Engr., both of Portland, Ore.

PENNSYLVANIA R. R.—A report from Trenton, N. J., states that plans are being completed by the Pennsylvania for the double-tracking of the Belvidere division from Trenton to Manunka Chunk, N. J. Work probably will be started in the spring. Alex. P. Gest is Div. Supt., Trenton.

RALEIGH & WESTERN.—The control of this railway has changed hands. The line is eight miles long, from Colon to Cumnock, N. C. It will be extended and improved. The new officers are: Edward W. Shedd, of Carthage, N. C., Pres.; Al. Legler, Jr., Secy.; J. Herbert Shedd, Treas.; C. C. Yates, Supt.; A. Legler, Industrial Agent, all of Cumnock, N. C.

SOUTHERN PENNSYLVANIA R. R.—The Boston "Transcript" states that Thomas F. Barrett & Co., 34 Pine St., New York, have effected the consolidation of a number of small railroad projects, for which charters have been granted during a period of several years, under the name of the Southern Pennsylvania R. R. Co. It is proposed to build a line from Summerville, W. Va., to the Pittsburg district, with a branch from Waynesburg to Millsboro, Pa., and another to Marietta, Ohio.

SIERRA MADRE & PACIFIC.—H. R. Nickerson, 24 Broad St., New York, Pres. of this company, has announced that all construction work on the road's extension to the Pacific coast of Mexico has ceased on account of the financial stringency. He expressed the opinion, according to reports from Mexico City, that the situation would soon improve, and that the construction work would be continued. The grade had been completed from Nueva Casas Grandes to a point about 20 miles south of that place. Part of the rails are on the ground for this part of the line. The bridge over the Guerrero River had been completed before the work was stopped. Col. W. C. Greene, of New York, who is largely interested in the Sierra Madre & Pacific, accompanied Mr. Nickerson to Mexico City on a recent trip. It is said that one object of their visit was to confer with the federal government authorities in regard to the concession under which the extension of the road is being built. It is understood that the government will grant an extension of time in which the line shall be completed. J. P. Hallihan is Ch. Engr., El Paso, Tex.

TEXAS & NEW MEXICO.—This company proposes to build from McKinney via Denton, Krum, Bridgeport and Jacksboro to West, Tex., 175 miles. Survey for 80 miles has been made, and four miles are graded. Contract has not been let, and it is desired to form a construction company in partnership with a railroad contractor to complete the line. Right-of-way and terminal grounds are assured and about $20,000 of the stock will be subscribed by local parties. Valuable coal lands aong the line are offered to the promoters. The road will traverse a territory greatly in need of railway facilities, although it is intended principally for coal and freight traffic. M. J. Healy is Vice-Pres. and Gen. Mgr., McKinney, Tex.

ELECTRIC RAILWAYS.

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ALLENTOWN, PA.—The Allentown & Reading Traction Co. may build a branch line from East Texas to Macungie and Emaus, Pa. I. S. Ruth is Supt. and Pur. Agt., Y. M. C. A. Bldg., Allentown.

BUFFALO, N. Y.—The Buffalo & Lake Erie Traction Co.'s line, now being built from Buffalo to Dunkirk and Erie, N. Y., will be completed between the Buffalo city line and Angola, about 25 miles, and will be in operation for that distance within a month. The line is also completed between Erie & Dunkirk, and the remaining portion, Angola to Dunkirk, will be finished early next summer. Niagara Falls power will be used for operation, to be furnished by the Niagara, Lockport & Ontario Power Co. J. R. Harrigan is Asst. Gen. Mgr., Brisbane Bldg., Buffalo.

DONORA, PA.—We are officially advised that the Donora & Eldora St. Ry. Co. will let contracts about Jan. 15th for building overhead line from Donora to Eldora, 3.3 miles. Surveys have been made and right-of-way obtained. Capital is practically all secured. A 350-ft. viaduct will be built. There will be 38,000 cu. yds. of grading. B. M. Hanna is Pres., 718 Pennsylvania Ave., Pittsburg. R. W. Hervey is Secy., Monongahela, Pa. Gisl. Gudmundson is Ch. Engr., 407 Fourth Ave., Pittsburg. Noted on Oct. 31.

The Home Capital St. Ry. Co. has been granted an extension of its franchise for building its proposed line from Hazzard to Donora, Pa., for two years from Nov. 5, 1907, on condition that the company double-track the line between these points and pave all highways used by company's tracks their entire width.

ASHEVILLE, N. C.—Financial arrangements have been made for building the Appalachian Interurban Ry. from Knoxville, Tenn., to Greenville, S. C., connecting Rutherfordton, Waynesville, and other points in North Carolina. Construction contracts have been let to the APPALACHIAN CONSTRUCTION CO., INC. Work is to begin about Jan. 1st. S. A. Jones, of Waynesville, N. C., and others are interested in this line.

YAZOO CITY, MISS.—Press reports state that the Supreme Court of Mississippi has upheld the issue of municipal bonds to build a street railway, for which a contract was let a year ago to the Sanders-Johnson Co., of Greenville, Miss. Construction may be undertaken soon. Kirkpatrick & Johnson, of Jackson, Miss., are the Engrs. Noted previously.

COVINGTON, LA.—The St. Tammany & New Orleans Elec. Ry. Co. has started work on its proposed line, which will connect Covington and Abita Springs with Mandeville and thence by boats with New Orleans. Right-of-way is being cleared at Ponchatoula Bayou and from this point, which is about halfway between Covington and Mandeville; work will proceed in both directions. Preston Herndon is Ch. Engr.

UPPER SANDUSKY, OHIO.—Frank M. Ohl, of Toledo, has announced that he will ask for a franchise for an electric railway through Upper Sandusky.

AKRON, OHIO.—The Northern Ohio Traction & Light Co.'s extension of the Barberton-Wadsworth line to Seville has been abandoned, it is announced. W. H. Douglass is Gen. Supt., Akron.

ATHENS, OHIO.—Charles S. Druggan, of Columbus, Ohio, is interested in project to build an electric railway from Athens to Nelsonville, Murray and Glouster.

CLINTON, IND.—Citizens of Clinton and Terre Haute, Ind., and Danville, Ill., are promoting a plan to connect those towns with an electric railway. Meetings have been held and preliminary steps taken. W. B. McKinley, Champaign, Ill., Pres. of the Illinois Traction System, has announced that no extension of that interurban line will be built south from Danville to Clinton and Terre Haute, Ind., at the present time, as reported.

NAPPANEE, IND.—The sum of $35,000 has been subscribed to encourage the construction of an electric railway into the city of Nappanee.

SYRACUSE, IND.—Judge McMaster, of the United States Superior Court at Indianapolis, has ordered a sale of the assets of the Indianapolis, Huntington, Columbia City & Northwestern Ry. Co., on Feb. 8, 1908. The company is in the hands of a receiver, William M. Self, of Syracuse. Company has completed about 20 miles of grading and laid about five miles of track on its proposed line from Indianapolis to Huntington, Ind. D. L. Horner is Ch. Engr., Syracuse.

MANISTEE, MICH.—The R. G. Peters Salt & Lumber Co., of Manistee, is considering the construction of an interurban electric railway between Manistee and Cadillac.

CENTRALIA, ILL.—The Centralia & Sandoval Ry. Co. has been formed by the owners of the Centralia & Central City Traction Co., for the purpose of building a four-mile extension from the present terminus of the line to Sandoval, Ill., serving the mining region between these points. Construction work probably will begin about April 1st. E. R. List is Pres., Centralia, Ill. J. C. Burton is Gen. Mgr. and Supt. of the Centralia & Central City Traction Co.

CHARLESTON, ILL.—W. R. Patton, Pres. of the Charleston & Paris Interurban Ry. Co., Charleston, Ill., states that this company will build an interurban line 28 miles long, connecting Charleston, Ashmore, Kansas, Grandview and Paris, Ill. The company has secured most of the franchises and right-of-way, and will let contracts for construction soon. The company's headquarters are at Charleston. U. S. Cook is Ch. Engr., Newcastle, Ind.

MATTOON, ILL.—R. B. Starbuck, Pres. of the Decatur, Sullivan & Mattoon Transit Co., Mattoon, writes us that right-of-way has been obtained for this company's proposed line, but that capital has not been secured yet. Survey has been made. The line will be 48 miles long, and will connect Mattoon, Sullivan, Bethany, Dalton City, Mount Zion and Decatur.

BLOOMINGTON, ILL.—The Corn Belt Traction Co., which proposes to build from Bloomington to Champaign, Ill., has been reorganized. It is stated that the capital stock of $100,000 has all been subscribed, and that franchises have been secured in Champaign, Mansfield and Farmer City. The officers are: Pres., John J. Pitts, Bloomington; Vice-Pres., W. D. Fairbanks, of Mansfield; Secy., Edward Hope, of Chicago; Treas., A. J. Keenan, of Le Roy. Construction may be commenced soon.

MARSHALLTOWN, IOWA.—Surveys have been started on the proposed Marshalltown-Melbourne interurban line, one of which takes in Luray, Iowa. Another survey will be made by way of Lamoille, which is a more thickly populated district. Hamilton Browne, 181 La Salle St., Chicago, is interested.

ELDORADO SPRINGS, MO.—The Eldorado Springs, Tiffin & Monegaw Springs Elec. Ry. Co. has been organized to build an electric railway from Eldorado Springs to Tiffin and Monegaw Springs, Mo. It is stated that power from the Osage River will be used to operate the line. Dr. C. A. Edgar, Eldorado Springs, is Pres.; and John Harrison, Tiffin, Mo., is Gen. Mgr.

FORT SMITH, ARK.—The Nelson Investment Co., capital $100,000, has been organized to build an interurban electric railway from Fort Smith to West Fort Smith, about ten miles. J. T. Nelson is Pres.; Joseph M. Spradling, Vice-Pres.; T. A. Trusty, Secy.; T. J. Wright, Treas. Other directors are C. E. Speer, W. J. Echols, F. A. Handlin, J. F. Boyer and C. C. Nelson.

LOCKHART, TEX.—Thomas Moore, of Austin, Tex., Pres. of the Texas Interurban Railway Co., has been granted by the City Council an extension of its franchise for six months.

OKLAHOMA CITY, OKLA.—The Oklahoma Interurban Traction Co., of Oklahoma City, with $500,000 capital stock, has been chartered to build an electric interurban railway in Oklahoma City and Capitol Hill; and also to El Reno, Okla. The incorporators are L. E. Patterson, S. C. Glasgow, G. F. Benz, John H. Wright and Lee Hamilton.

CHICKASHA, OKLA.—S. Jones, who has a street railway franchise, has filed with the city officials a certified check on one of the local banks for $1,000. The conditions of the contract are that the line must be started within eight months and four miles finished within 16 months, otherwise the check is to be forfeited to the city.

DENVER, COLO.—The Inter-Mountain Ry. Co. has been incorporated in Colorado to take over the old Denver, Lakewood & Golden R. R., now known as the Denver & Inter-Mountain Ry. This line at present is operated to Barnum, Colo., five miles, by electricity, and from there to Golden by steam. The Golden division will be converted for electrical operation by the new company, and many improvements made on the roadbed. All of the rolling stock and other equipment of the Denver & Inter-Mountain Co. has been purchased by the new company. Capital stock, $1,000,000. Incorporators: Daniel Chase, Willow Lakes, S. Dak.; Thomas B. Dean and T. J. Milner, Denver; H. Chase, Willow Lakes; Judge Caldwell Yeaman, Frank W. Loveland, and others. Mr. Loveland is Treas. of the D. & I.-M. Ry.

CANON CITY, COLO.—The Canon City & Royal Gorge Elec. R. R. Co. will soon call for bids for grading and construction work. Frank D. Heath is Supt. Construction.

STANFORD UNIVERSITY, CAL.—A. W. Bell, of Palo Alto, who has purchased land for the right-of-way of the Peninsula R. R. Co. from San Mateo to Stanford University, has made the announcement that the entire right-of-way is now in the possession of the company with the exception of three pieces, which will be secured by condemnation suits. This company will build an electric railway connecting San Jose, Cupertino, Mayfield, Palo Alto, Redwood City and San Mateo. F. R. Chapin, San Mateo, is Gen. Mgr.

VALLEJO, CAL.—Melville Dozier, Jr., Pres. and Ch. Engr., Vallejo & Northern Ry. Co., 1115 Broadway, Oakland, Cal., states that this company will build an electric line from Vallejo to Sacramento, Cal., 58 miles, via Napa Junction, Creston, Cordelia, Suisun and Winters, with a branch from Suisun to Vacaville via Fairfield and Cement, and a branch from Winters to Woodland, which will bring the total up to 130 miles. Surveys have been completed and grading is to begin in the spring of 1908. Maximum curvature, 3 degrees; maximum grade in mountains, 1½ per cent. The other officers are: Vice-Pres., C. F. Kinsey, Oakland; Secy., T. T. C. Gregory, Fairfield; Treas., George S. Lackie, Oakland. W. T. Kelley, Secy. of the Merchants' Association, Vallejo, advises us that the city of Vallejo has granted the V. & N. Co. valuable waterfront privileges.

ELY, NEV.—Wm. B. Thompson has petitioned the City Council for a 50-year blanket franchise covering all streets and alleys in the town of Ely, in return for which he proposed to build and equip an electric railway between the depot at Ely City and the town of Ely.

O. J. McConnell, through his attorney, Thomas L. Mitchell, has asked the Board of County Commissioners for a franchise for an electric railway, the franchise to extend from the smelter to and covering all the streets, avenues and alleys of Ely City.

MONTREAL, QUE.—In his annual report to the stockholders, L. J. Forget, Pres. of the Montreal St. Ry. Co., stated that right-of-way has been secured from the present terminus of the Back River route to a point outside the village of St. Vincent de Paul, a 50-year franchise has been secured for an extension through Notre Dame de Grace, and additional right-of-way has been purchased on the Cartierville line, in order to permit the continuing of the double-tracking of this division.

COBALT, ONT.—Franchise has been secured from the municipal councils of the Cobalt district for the construction of an electric railway between Cobalt and Haileybury, Ont., with an extension later to New Liskeard. It is planned to run the line up the Montreal River Valley through Cobalt, Haileybury, Argentite, North Cobalt and New Liskeard to Quinze Rapids and possibly to Larder Lake, serving extensive mining and agricultural districts. It is expected to complete the line by July, 1909. Those interested in the project are: Frank Latchford, Ottawa, Ont.; Judge C. M. Stone, Cleveland, Ohio; W. J. O'Brien, Renfrew, Ont.; J. W. Fitzpatrick, Ottawa; T. Fitzpatrick, New Liskeard. Noted last week.

LIGHT AND POWER PLANTS.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked until 2 p. m., Dec. 10, by John H. O'Brien, for furnishing lamps and gas and naphtha and for maintaining lamps in public streets, parks and buildings, from Jan. 1 to Dec. 31, 1908. Also for furnishing, putting in and maintaining gas regulators from Jan. 1 to Dec. 31, 1908; and for furnishing steam for heating or power purposes to certain public buildings, from Jan. 1, 1908, to Dec. 31, 1908, both inclusive.

ALBANY, N. Y.—The Chamber of Commerce has passed a resolution asking Charles H. Gaus, Mayor, to enforce the provisions of the Ordinance of the Common Council, passed in April, 1906, requiring the placing of telephone, telegraph, electric light and power wires, in certain districts of the city, in conduits or subways. The work was to have been completed by Jan. 1, 1908, but a very small portion has been so far progressed. The matter has been referred to Wallace Greenalch, Comr. of Public Works, who has called upon the various corporations with regard to their complying with the ordinance. The companies affected are: Western Union Telegraph Co., Postal Telegraph-Cable Co., Hudson River Telephone Co., Albany Home Telephone Co., Albany Electric & Illuminating Co. The last-named company has advised that plans already have been prepared, and the work will be started in the spring. Walter Melius is City Engr.

ATLANTIC CITY, N. J.—A. W. Farrand, City Electrician, has reported that it will cost $200,000 to place all of the electric lighting wires under ground in the city. Under an agreement between the city and the companies the work will be commenced in the spring and completed in three years.

LEBANON, PA.—Contract has been awarded to GEORGE C. UNGER, of Lebanon, to erect a pole line for the transmission of electricity from Mish's Mill to the Weaver bologna factory, a distance of about 15 miles. It is reported that the Swatara Electric Light & Power Co. will furnish electricity for lighting the factory.

WAYNESBORO, PA.—Plans are being considered by the officials of the Chambersburg, Greencastle & Waynesboro Street Ry. Co. for increasing the power plant, to supply electricity for the extension of the line from Greencastle to Chambersburg. J. F. Geiser is Supt.

AMHERST, VA.—The Amherst Electric Light & Power Co., lately incorporated with $15,000 capital, will establish a plant for furnishing electric light and power. No contracts have been awarded for plant or buildings. Water, steam or gasoline power will be used to operate plant. H. L. Page is Pres.; O. V. Hanger, Secy.

TRYON, N. C.—E. W. Hall, Oak Hall Hotel, Tryon, is interested in installation of machinery for a gas plant to supply a town of 8,000 population.

BREVARD, N. C.—The Bre[illegible] Light & Power Co. is planning to enl[illegible] its plant. The company also plans to [illegible] an ice plant. Work will be done in [illegible] spring. J. W. Chapman is Mgr.

WILMINGTON, N. C.—The [illegible]solidated Railways, Light & Power Co. [illegible]templating increasing the capacity or [illegible]wer plant and will purchase the followi[illegible] [illegible]uipment: One 500-KW. Westinghouse-P[illegible] turbo-generator set; one 250-HP. Ba[illegible] & Wilcox boiler, and a 500-HP. A[illegible] barometric condenser. A. B. Skeldi[illegible] Wilmington, is Mgr.

SPARTANBURG, S. C.—Th[illegible] Southern Power Co., Charlotte, N. C., [illegible]paring plans for a steam power electr[illegible]nt, capacity, 50,000 HP., at Spartanb[illegible] to cost $2,000,000. W. S. Lee, Jr., [illegible]gr.-in-Charge.

BONIFAY, FLA.—C. A. Mille[illegible] Bonifay, intends to install an acetylene ga[illegible]nt for lighting stores and dwellings.

COLUMBIANA, ALA.—The [illegible]mbiana Light & Power Co. has engaged [illegible] Cunningham, New Orleans, La., to pr[illegible] plans and specifications for installation [illegible] electric light plant. When plans are pre[illegible]d bids will be received on equipment [illegible] plant complete.

SOUTH PITTSBURG, TENN.—[illegible] A. Tate has purchased the municipal ele[illegible] light and power plant and will install [illegible] equipment, provide new wiring, etc. [illegible]ity has granted exclusive franchise for ten [illegible]ars and perpetual franchise thereafter. [illegible] Tate agrees to furnish city 50 50-c. [illegible] street lights free for five years, repre[illegible]ting a purchase price of about $3,600.

LOUISVILLE, KY.—The Kentu[illegible] Electric Co., Bryan Allen, Secy., Se[illegible]th and Ormsby Sts., will erect a tempor[illegible] frame power-house, on Third Ave., near the Ohio River, to cost $125,000.

CLEVELAND, OHIO.—John C. Keys, Pres. of the Cuyahoga Light Co., is reported to have announced that if the franchises applied for are granted, four electric light and power plants will be built in the downtown section of the city. The company will have instead of one large central station, several smaller plants. One will be located on the river or on the lake front, and will be used for emergency purposes. One station is now being equipped on East Third St. Another plant in the rear of the Guardian Trust Bldg. has been in operation for some time.

MINERVA, OHIO.—Bids are asked until noon, Dec. 4, by the Board of Public Affairs of Minerva, Stark and Carroll Counties, for a 150-HP. boiler, 150 lbs. pressure, for the municipal electric light and water plant. Specifications are on file at the office of Engineering News, New York.

NEWBURGH (Cleveland post-office), OHIO.—Bids are asked until Dec. 5, by the Board of Public Service for furnishing, lighting, extinguishing and keeping in repair, including the furnishing of gas and gasoline, and all material necessary therefor, 140 street lights for a period of one year. William Jentzen is Clerk.

ASHVILLE, OHIO.—Bids are asked by W. P. Powell, Village Clerk, until Dec. 2 for furnishing, f. o. b. Ashville, all or part of the arc lamps and copper wire necessary for use in connection with the installation of an electric street lighting system.

Bids are asked by W. P. Powell, Village Clerk, until Dec. 20 for furnishing all material, except copper wire and arc lamps, and constructing a system of electric street lighting to be operated in connection with the sub-station of the Scioto Valley Traction Co. R. Fullerton, Ch. Electrician, Scioto Valley Traction Co., Columbus, Ohio.

KNIGHTSTOWN, IND.—The managers of the municipal electric light plant are contemplating increasing the output of the plant and will install a 100-KW., 2300-volt, 3-phase, 60-cycle Curtis steam turbine and two boilers of 175 HP. each. F. S. Wilson is Supt.

WABASH, IND.—Plans are being completed by the Logansport & Wabash Valley Gas Co., Wabash, for an extension of its mains in the various cities in which it operates. The South Side of this city, in which there has been no gas, will be supplied.

TRAVERSE CITY, MICH.—We are officially advised that it is uncertain when bids will be received for constructing a plant for the Manistee River Power Co., which will be located on the Manistee River in Wexford County. The company will require full equipment for a hydro-electric plant to develop 6,000 HP., with 60 miles of transmission wire. Cost, $600,000. Don J. Albertson, Kalamazoo, Mich., is Des. Engr.

OWOSSO, MICH.—The Owosso Light & Power Co. has been organized with E. M. Hopkins, of Detroit, Pres., and Frank Wescott, of Owosso, Treas. The company proposes to build a dam, 500 ft. long and 30 ft. high, at a point on the Shiawassee River, two miles and a half north of the city. The proposed plant will furnish electricity to operate the proposed Grand Rapids-Pontiac electric railway, and for light and power in Owosso. Work will commence on construction of the dam next spring.

HARVARD, ILL.—The City Council has passed a resolution granting Paul F. Schuster and Warren S. Stearns, of Rockford, Ill., the right to install a gas plant in Harvard for lighting, heating, cooking, etc. They will commence work at once, securing the necessary frontage consents from the citizens, and if successful, will install a $30,000 plant.

CAIRO, ILL.—The Cairo Electric & Traction Co., Cairo, Ill., is to make improvements to its plant, and will let contracts for two 500-KW. turbine generators, one 300-KW. motor generating set and one 200-KW. motor generating set. O. C. Macy is Mgr., Cairo.

EAU CLAIRE, WIS.—The City Council has decided to ask for bids for lighting the streets with either gas or electricity for a period of five years.

ALBIA, IOWA.—The Albia Electric Light & Power Co. is planning improvements and extensions to its system, and will install a 200-K.W. generator for railway service, a 200-HP. Corliss engine, and construct 4½ miles of track and will also purchase cars, 25-HP. motors and trailers. A. R. Jackson is Mgr.

CEDAR RAPIDS, IOWA.—The Cedar Rapids & Iowa City Railway & Light Co., Cedar Rapids, contemplates additions to its boiler room and equipment, including coal and ash handling apparatus, chain grates, conveyors and possibly economizers. William G. Dey is Mgr.

GLENWOOD, MINN.—The owners of the power plant in this town contemplate installing a 220-HP. engine. H. Petersen is Secy.

SULPHUR SPRINGS, ARK.—Plans are being prepared by Smith & Powers for a combined electric light plant and water-works system, to cost about $25,000.

FORT WORTH, TEX.—Bids are asked until 3 p. m., Dec. 20, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for installing a conduit and electric wiring system and low pressure heating apparatus for the extension to the U. S. post-office and court-house at Fort Worth.

PAWHUSKA, OKLA.—W. W. COOK & SON, of Muskogee, Okla., are reported to have secured the contract for constructing water works, sewers and an electric plant, for about $100,000.

FORT LYON (Las Animas post-office), COLO.—Bids were opened Nov. 23 at the Bureau of Yards and Docks, Navy Dept., Washington, for the construction of a central power, light and heating plant and accessories at the Naval hospital, New Fort Lyon, Colo.: Lewis & Kitchen, 1200 Michigan Ave., Chicago, (1) $90,728, (2) $2,150, (3) $2,150. Evans, Almiral & Co., 281 Water St., New York, (1) $91,472, $98,750, (2) and (3) $2,285, (4a) $85,582, (b) $8,894, (c) $90,-935, (d) $96,840, (e) $2,400; Sterns Roger Mfg. Co., 1720 California St., Denver, Colo., (4) $99,800; Dixon Engineering & Contracting Co., Toledo, Ohio, (3) $2,850; D'Olier Engineering Co., 121 South Eleventh St., Philadelphia, (1) $77,800, (2) $2,090, (4a) $77,300, (b) $77,000, (c) $77,500; Joseph L. Sweigard, Betz Bldg., Philadelphia (4 part) $5,050; C. L. DE MURALT, 114 Liberty St., New York (awarded contract), (1) $72,000, (2) $2,000, (3) $2,600, (4) $62,250.

PORT TOWNSEND, WASH.—It is stated that the Pacific Electric Co. contemplates installing and operating 50 arc lights, water wheel, dynamos, transformers, wiring, poles and connections, at an aggregate cost of $11,061.

TULALIP, WASH.—Bids are asked by the Commissioner of Indian Affairs, Department of the Interior, Washington, D. C., until 2 p. m., Dec. 27, to construct an electric lighting system, at the Tulalip School. Dr. Charles M. Buchanan is Supt.

PASADENA, CAL.—The City Council has decided to ask for additional bond issues for completing the municipal erectric light plant in two propositions, aggregating $200,-000, to carry out the recommendation of the Cory report. One proposition is to issue $50,-000 in bonds to complete the plant as it now stands, and the second to issue $150,000 to equip the plant for commercial lighting. S. J. Van Orman is City Engr.; William Waterhouse is Mayor.

VALLEJO, CAL.—Bids are asked until Dec. 3 at the Bureau of Supplies and Accounts, Navy Dept., Washington, D. C., for five induction motors, to be furnished at the Navy Yard, Mare Island, Cal., as per Schedule 448. Applications for proposals should designate the schedule by number. E. B. Rogers is Paymaster-Gen., U. S. A.

LONG BEACH, CAL.—The Edison Electric Co., Los Angeles, plans to expend between $100,000 and $150,000 for a plant here. A. L. Selig, Los Angeles, is Mgr.

CANFIELD, ONT.—J. J. MURRAY & CO., Cayuga, Ont., have been awarded the contract for the erection of the gas pumping station and reservoir for the Dominion Gas Co., near Canfield, Ont. The contract price is $35,000.

LISTOWEL, ONT.—Bids are asked for lighting the town of Listowel with electricity with both arc and incandescent lamps. C. A. Lee is Chn. Light Com.

CAMPBELLFORD, ONT.—John S. Fielding, 15 Toronto St., Toronto, is engineer for the proposed power plant, which is to be constructed at Middle Falls. The cost of the plant is estimated at $60,000. E. C. West is City Secy.

NANAIMO, B. C.—The Nanaimo Electric Light, Power & Heat Co. will soon commence the construction of a dam at Westwood's Swamp, about three miles from the city, to increase the water capacity for the electric plant.

BRIDGES.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked until 2 p. m., Dec. 9, by James W. Stevenson, Comr. of Bridges, for the construction of the masonry piers, surface and sub-surface changes, and steel superstructure of the Manhattan and Brooklyn approaches of the Manhattan Bridge, over the East River, between Manhattan and Brooklyn.

JENKINTOWN, PA.—The Noble bridge, on the old York Road north of Jenkintown, will be replaced by a concrete and steel bridge, 60 ft. wide. Estimated cost, about $15,000.

NEW ORLEANS, LA.—Bids are asked until 1 p. m., Jan. 2, at the office of the Comptroller, for the erection of a bascule trunnion bridge over the Bayou St. John, at the intersection of Esplanade Ave. Charles R. Kennedy is Comptroller.

TROY, OHIO.—The following bids were received by the County Commissioners on Nov. 12, for the construction of (a) Milton bridge superstructure, (b) Milton bridge substructure, (c) grading approaches to Milton bridge, (d) Ervington bridge, (e) Troy lift bridge, (f) reinforced concrete culvert: Toledo-Massilon Bridge Co., (a) $14,600, (b) reinforced plan submitted, $10,000, (c) $6,-380, (d) $8,125; Central States Bridge Co., (a) $14,620, (b) $6,100; Orgonia Bridge Co., (a) $14,570, (d) $6,390; Brookville Bridge Co., (a) $14,375, (d) $6,450, (e) $8,400; Taver & Renick, (b) $13,675; Geo. J. Bock & Son, (a) $14,610, (b) $13,700, (f) $1,600; Columbus Bridge Co., (a) $14,800, (d) $6,325; Hennessey Bros., (b) (c) (f) as a whole, $37,-030. L. A. Ziegenfelder is City Clk.

NORWOOD (Cincinnati post-office), OHIO.—Bids are asked by the Board of Public Service, L. H. Gebhart, Clk., until Dec. 14, for furnishing material and constructing the substructure of a viaduct over the Baltimore & Ohio Southwestern R. R. tracks and Section Ave. Jas. A. Stewart, 712 Traction Bldg., Cincinnati, is Engr.

LA FAYETTE, IND.—Bids are asked until 10 a. m., Dec. 18, by the Commissioners of Tippecanoe County for the construction of a bridge near Granville, between Wayne and Shelby Townships. John Foresman is County Audr.

PAOLI, IND.—Bids are asked until 2 p. m., Dec. 3, by the County Commissioners, for constructing a new floor for Finley bridge over Lost River, in Orleans Township.

NEWPORT, IND.—Bids are asked until 10 a. m., Dec. 4, by the County Commissioners, for construction of the superstructure for bridge over the Wabash River. H. T. Payne is County Audr.

MUNCIE, IND.—Bids are asked until 10 a. m., Dec. 4, by the Commissioners of Delaware County, for the construction of three bridges, two across the Mississinewa River and one across White River.

VINCENNES, IND.—The VINCENNES BRIDGE CO. has been awarded the contract for building and repairing a number of bridges in all parts of the county, at $12,-075.

CHICAGO, ILL.—Arrangements have been perfected by the Village Board of Cicero, and the Board of Local Improvements of Chicago, whereby the sewer in 52d Ave., Chicago, will be extended from Madison St. to the drainage canal, draining Austin and Cicero. The extension will be built by the Sanitary District of Chicago, at an estimated cost of $250,000.

RIVER FALLS, WIS.—Bids are asked until Dec. 5, by Allen P. Weld, City Clk., for constructing a steel truss bridge at the Cedar St. crossing of the Kinnickinnic River, to be 140 ft. long, concrete floor 20 ft. wide, cement sidewalks, 5 ft. wide, and abutments.

MENOMONIE, WIS.—The Special Bridge Committee is reported to have submitted a favorable report to the Common Council for the construction of a bridge over the Red Creek River.

COUNCIL BLUFFS, IOWA.—Bids are asked until 9 a. m., Dec. 3, by W. C. Cheyne, County Audr., for the construction of the bridges required by Pottawattamie County for the year commencing April 1, 1908. S. L. Etnyre is City Engr.

JACKSON, MINN.—Bids are asked until Dec. 10, by P. D. McKellar, County Audr., for constructing a 100-ft. steel bridge and approaches in Jackson.

MANKATO, MINN.—The following bids for the construction of the new Minnesota River bridge were opened on Nov. 14 at the rooms of the Commercial Club: A. Y. Bayne & Co., Minneapolis (two bids), $25,800 and $23,700; Minneapolis Steel & Machinery Co., 28th and Minnehaha Sts., Minneapolis (three bids), $27,800, $26,300 and $23,500; Hennepin Bridge Co., 968 Laurel St., Minneapolis (four bids), $23,530, $22,265, $20,968 and $18,968; Minneapolis Bridge & Iron Co., 205 Lumber Exchange (three bids), $27,485, $26,000 and $22,400.

This city, Blue Earth County and North Mankato are contemplating having a second steel bridge constructed across the Minnesota River here. Estimated cost, $20,000. M. B. Haynes is City Engr.

Plans for a two-span steel bridge, each span to be 170 ft. in length, submitted by the Hennepin Bridge Co., Minneapolis, have been approved by an investigating committee, composed of the members of the Council, a number of merchants and M. B. Haynes, City Engr.

CHANUTE, KAN.—We are officially advised that the SOUTHWESTERN BRIDGE CO., Joplin, Mo., has been awarded the contract for the construction of a bridge, consisting of one 200-ft. span, one 70-ft. span, and two 30-ft. steel approaches, the roadway being 20 ft., across the Neosho River, near Chanute, at $11,573. H. C. Sahlmann is Contr. Engr., Southwestern Bridge Co.

EMPORIA, KAN.—Bids are asked until noon, Nov. 30, by John E. Martin, County Clk., for the construction of stone abutments for two bridges.

TOPEKA, KAN.—Bids will be asked for at once by the Topeka Ry. Co. for the construction of a viaduct on Branner St. Estimated cost, $60,000. A. M. Patten is Gen. Supt.

FARGO, N. DAK.—Bids are asked by Arthur G. Lewis, County Audr., Cass County, for replanking or paving Front St. bridge and approach in the city of Fargo, over the Red River, and for repairing a bridge in Barnes Township, over the Cheyenne River.

ST. LOUIS, MO.—The Manufacturers' Ry., controlled by the Anheuser-Busch Brewing Association, contemplates constructing a steel viaduct 1,500 ft. long, to carry two tracks, and with a horizontal clearance of 21 ft.

IOLA, COLO.—The contract for the construction of the Gunnison County bridge was awarded on Nov. 14 by T. W. Jaycox, State Engr., to the PUEBLO BRIDGE CO., 401 East Eighth St., Pueblo, at $4,650.

SEATTLE, WASH.—Two overhead steel bridges will be constructed at Holgate and Stacey Sts. for the Northern Pacific Ry. Co. and the Pacific Coast Co. The structures will be 30 ft. wide, with an additional 8 ft. on one side for foot passengers, and will be so located that an additional 30 ft. may be added when traffic demands it. Estimated cost, $75,000 each. H. E. Stevens, St. Paul, Minn., is Engr. Bridges, Northern Pacific Ry. Co. James Andersen, Seattle, is Ch. Engr., Pacific Coast Co.

WALLA WALLA, WASH.—The following are the bids for the construction of the bridge over Mill Creek, on Fourth St.: Dion Keefe, reinforced concrete arch bridge, $12,-616; F. E. Nelson, girder bridge, $8,490; reinforced concrete arch, $9,990.

COLFAX, WASH.—Bids are asked by Wm. M. Duncan, County Audr., until Dec. 4, for the construction of a bridge over Palouse River.

CONNELL, WASH.—Bids are asked by H. B. Pratt, County Clk., at Pasco, until Dec. 2, for a 50-ft. Howe truss span bridge. 4½ miles northeast of Connell.

SPOKANE, WASH.—WILLIAM OLIVER, Spokane, was awarded the contract on Nov. 15 by the County Commissioners for the construction of the La Pray bridge across the Spokane River in the northwest portion of the county, at $8,500. Other bidders were: International Construction Co., $11,-739; E. A. Oliver, $9,900; C. A. Conant & Co., $8,759.

LINDEN, CAL.—Bids are asked until 10 a. m., Dec. 3, by the Board of Supervisors of Joaquin County, at the Court-House, Stockton, for the construction of a steel span bridge over Mormon Channel. Eugene D. Graham is County Clk.

BRANDON, MAN.—A reinforced concrete bridge of three 90-ft. spans and two 60-ft. spans, with a 24-ft. clear roadway, and provision for street car traffic, may be built here.

BUILDINGS.

(denotes that this work is advertised in Engineering News.)*

WEST NEWTON, MASS.—Bids are asked until 2 p. m., Dec. 2, by George H. Elder, Comr. of Public Bldgs., City Hall, for erecting a technical high school building, also for heating and ventilating system and electric plant. George F. Newton, 6 Beacon St., Boston, Mass., is Arch.; French & Hubbard, 85 Beach St., Boston, are Engrs.

PROVIDENCE, R. I.—Bids were received as follows Nov. 26 at the office of James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the installation of an elevator system in the post-office building, Providence, R. I.: Otis Elevator Co., 17 Battery Place, New York, $17,975; Standard Plunger Elevator Co., 1 Broadway, New York, $20,235; Oct. 1, 1907.

NEW HAVEN, CONN.—The contract for the Oliver Memorial Hall for Sheffield Scientific School, Yale University, has been let to the SPERRY & TREAT CO., Wall St., New Haven. The cost of the building is about $140,000. Chas. C. Haight, 452 Fifth Ave., New York City, is the Arch.

NEW YORK, N. Y.—We are officially advised that the plans prepared by Hoppen, Koen & Huntington, 244 Fifth Ave., for a terminal station for the Manhattan end of the Brooklyn Bridge, to be built on Park Row, have been accepted by the Bridge Department, and details are being finished before submitting them to the Art Commission. James W. Stevenson is Bridge Comr.

The following architects, all of New York, have been selected to prepare competitive plans for a new post-office building for this city, the plans to be opened March 25, 1908: Carrere & Hastings, 28 East 41st St.; Hejna & Lafarge, 30 East 21st St.; McKim, Mead & White, 160 Fifth Ave.; George B. Post, 33 East 17th st.; H. Van Buren Magonigle, 7 West 38th St.; Whitfield & King, 160 Fifth Ave.; Kenneth M. Murcheson, Jr., 320 Fifth Ave., and Cass Gilbert, 11 East 24th St. The judges to pass upon the plans are James G. Hill, 47 Corcoran Bldg., Washington, D. C.; Henry F. Hornkastle, New York; E. M. Wheelwright, 100 Boylston St., Boston, and Frank Mills Day, 925 Chestnut St., Philadelphia, Pa.

NEW YORK, N. Y.—George Raymond Euell, Arch., 3694 Broadway, has filed plans for a proposed 6-story brick and stone apartment house, to be erected by the T. J. McGuire Construction Co., 100 West 139th St. The building will be 100 × 90 ft., will cost $175,000, and will be erected at the corner of Amsterdam Ave. and 178th St.

NEW YORK, N. Y.—We are officially advised that W. H. McElfatrick, Arch., 1402 Broadway, has let general contract to F. T. NESBIT & CO., 116 Nassau St., for constructing a brick and stone theater, 100 × 150 ft., at Greenpoint, L. I., for the Orpheum Theater Co., care P. H. Williams, 1133 Broadway. Cost, $200,000. Sub-contracts are being let.

SYRACUSE, N. Y.—The plans of Green & Wickes, 110 Franklin St., Buffalo, N. Y., for the permanent improvement of the grounds and building, at Syracuse, have been accepted by the State Fair Commission. In the plans the following buildings are shown: Administration, Hospital and Dispensary, Manufactures and Liberal Arts building, Dairy building, Horticultural building, Poultry, Art building, Women's building, Restaurant, open air theater, six sanitary buildings, police buildings, Domestic Arts building and superintendent's house.

PHILADELPHIA, PA.—The Committee on Property of the Board of Education has awarded the contract to erect a 12-division brick school at Montgomery Ave. and Wildey St. to LYNCH BROS., Lippincott Bldg., at $124,116. Bids were received Nov. 11.

Philip H. Johnson, Land Title Bldg., has been engaged to prepare plans for the House of Detention to be erected by the County Commissioners at Twenty-second and Arch Sts. The cost of the building will be about $150,000 and about $20,000 additional will be needed for the equipment.

Press reports state that George W. Reynor will start at once erecting 32 houses in the vicinity of Johnson and Ross Sts., at a total cost of $125,000. It is said that 22 of the dwellings will be two stories high, of brick, 16 × 52 ft. They will be built at 6341 to 6361 and 6340 to 6360 Ross St. The remainder will be 3-story houses on lots of the same size. They will be built at 214 to 222 and 228 to 236 East Johnson St.

GERMANTOWN (Philadelphia post-office), PA.—Plans are being drawn by Wilson, Harris & Richards, Drexel Bldg., for the erection of a Methodist Episcopal church at Wayne Ave. and Queen St., at a cost of $150,000. The structure will include a church to seat 600 people, a Sunday-school for 250 and a lecture hall to seat 650. Work will be started in the spring. It will have a frontage of 80 ft. on Wayne Ave. and a depth of 170 ft. on Queen St. The plans, which call for a building of gothic style, have been approved by the Building Committee.

WASHINGTON, D. C.—The addition to the McKinley Manual Training School will be constructed by the GEORGE A. FULLER CO., Munsey Bldg., Washington, D. C., at $108,340. Bids for the above were opened at the office of the Commissioners of the District of Columbia on Nov. 2, and were given in full in Engineering News, Nov. 7.

John B. Henderson, 1601 Florida Ave., N. W., has awarded contract to the GEORGE A. FULLER CO., Munsey Bldg., for construction of two dwellings at 2220 and 2222 16th St., N. W. They will be four stories high, 25 × 100 ft., and 35 × 88 ft., with white marble bases and white cement exterior with ornamental terra cotta trimmings, tile roofs. Cost, about $120,000. George Oakley Totten, Jr., 808 17th St., N. W., is Arch.

NORFOLK, VA.—Bids are asked until Dec. 2, by Ferguson & Chandler, 20 Bank St., for constructing five 2-story houses, 96 × 60 ft., for Joseph R. Owen, 143 Plume St. The buildings will be built of press prick and blue stone, with concrete floors.

NEW ORLEANS, LA.—Following are the bids received by the Finance Committee, Nov. 11, for erecting an annex to the City Hall: Jefferson Construction Co., North Peters and Louisa St., New Orleans, $286,000 and $5,000 additional for a passenger elevator (recommended for award), and W. T. Carey & Bro., 1226 Carrollton Ave., New Orleans, $276,000 and $5,000 additional for a passenger elevator.

GRAYSON SPRINGS, KY.—Kenneth McDonald and W. J. Bodd, Archs., Lincoln Bank Bldg., have prepared plans for a 3-story summer hotel, at Grayson Springs, for the Grayson Springs Co., Leitchfield, Ky. It will be built of brick and stone and will cost $125,000.

CAREY, OHIO.—Emile M. Uhlrich, Arch., 1328 Schofield Bldg., Cleveland, has let general contract to JOHN BURKART, Kenton, Ohio, for a 1-story and basement church for the Roman Catholic congregation, Carey. Cost, $130,000.

COLUMBUS, OHIO.—Bids are asked until 10 a. m., Nov. 30, by Capt. H. J. Hirsch, Constr. Q. M., Columbus Barracks, for construction of three double sets of lieutenants' quarters, including electric wiring and fixtures; one quartermaster's storehouse and one wagon shed at Columbus Barracks.

COLUMBUS, OHIO.—Richards, McCarty & Bulford, Archs., The Ruggery, have prepared plans and will receive bids for a 6-story mercantile building for the Lazarus Realty Co. Brick, steel, terra cotta and reinforced concrete will be used for construction. Estimated cost, $250,000.

TOLEDO, OHIO.—Tiedtke Bros. intend to erect a building to cost between $200,000 and $300,000. The main part of the proposed structure will be on Water St., with 40 ft. on Summit St. Only six stories will be built at first, with provision for four more.

CINCINNATI, OHIO.—It is stated that Samuel Hannaford & Sons, Hulbert Block, are preparing plans for a building for St. Xavier College. Estimated cost, $200,000.

DAYTON, O.—See under Manufacturing Plants.

BAY CITY, MICH.—Smith-Hinchman & Grylls, Archs., Detroit, have let general contract to the C. A. MOSES CONSTRUCTION CO., Commerce Bldg., Chicago, for a 7-story hotel for the Wenonah Hotel Co., A. E. Bonsfield, Chn., Bay City. Cost, $150,000.

FLINT, MICH.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded to W. J. McALPINE, Dixon, Ill., contract for the construction of a post-office building at Flint, Mich., at $71,100; time, May 31, 1909.

CHICAGO, ILL.—Bids are asked until Dec. 9 at the office of the Commanding Officer, 16th St. and Michigan Ave., for erecting an armory for the Seventh Regiment, I. N. G., probable cost $300,000. W. Carbys Zimmerman, State Arch., 1101 Steinway Hall.

D. H. Burnham & Co., Archs., Railway Exchange Bldg., 1 Jackson Boulevard, are completing plans for an office building to be built at the corner of Michigan Ave. and Adams St., for the People's Gas Light & Coke Co., on the premises. It will be 18 stories, 130 × 171 ft., of fireproof steel construction, have probably pressed brick and terra cotta exterior, and is estimated to cost $1,000,000.

CHICAGO, ILL.—Plans are being prepared by Henry J. Schlacks, Arch., 99 Randolph St., for a hospital building for St. Anthony de Padua, at 19th St. and Marshall Boulevard. The building is to conform with present structure. It will be five stories high, 50 × 116 ft., of brick, stone and fireproof

construction. Cost, $125,000. Bids will be received by the architect in about two weeks.

Worthmann & Steinbach, Archs., 625 West Chicago Ave., are preparing plans for two wing additions, at Racine Ave. and Grace St., for the House of Good Shepherd, on premises. One wing is to be three stories high, 38 × 200 ft. and the other three stories 50 × 112 ft., of press brick and stone construction. Bids will be received by the architects after Jan. 1.

Edmund R. Krause, Arch., 75 East Monroe St., is completing plans and is ready for estimates on the superstructure of a warehouse, at Orleans and Ohio Sts., for Tyler & Hippach, 117 North Clinton St. The building will have five stories, and will be 60 × 100 ft., of brick and mill construction. Cost, $125,000.

ST. PAUL, MINN.—J. Walton Stevens, Arch., New York Life Bldg., has prepared plans for the Hughes High School building, 272 × 192 ft., on McMillan St., for the Board of Education, William Grautma, Clerk, City Hall, Cincinnati, Ohio. Estimated cost, $750,000.

STILLWATER, MINN.—C. H. Johnson, Manhattan Bldg., St. Paul, Minn., is completing plans for the cut stone state prison to be built here. It will be fireproof, three stories high, with steel cells and partitions, steam heating, eectric lighting, skyights and electric passenger elevator. The State Board of Control will take bids soon on the general construction. Cost, $200,000.

*WICHITA, KAN.—Bids are asked until 3 p. m., Jan. 6, by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for constructing an addition to the U. S. post-office and court-house at Wichita.

FORT D. A. RUSSELL, WYO.—The constructing quartermaster at Fort D. A. Russell has been directed to call for bids for construction of buildings at this post, as follows: Twelve sets of officers' quarters, two band barracks, three double field artillery barracks, six artillery stables, one field band and staff stables, two artillery gunsheds, three double shop buildings. The construction of these buildings will involve an expenditure of over $500,000 and will complete with buildings already under way and erected accommodations for a full regiment of cavalry and one of artillery.

ST. LOUIS, MO.—The Southern Society of St. Louis, Murray Carleton, Pres., contemplates erecting club-house at a cost of $150,000.

ST. LOUIS, MO.—Isaac S. Taylor, Arch., Mercantile Bldg., has prepared plans and will receive bids for a 6-story mercantile building, 100 × 90 ft., at Broadway and St. Charles St., for the Aberdeen Investment Co. The structure will be constructed of brick, granite, terra cotta, steel and reinforced concrete. Estimated cost, $150,000.

Plans have been prepared by Chas. H. Dietering, Missouri Trust Bldg., for a 4-story apartment building, to be built of brick, Carthage stone, terra-cotta and reinforced concrete, 230 × 74 ft., at Grand and Castleman Aves., for the Shisler & Bidwell Building Co., 3624 Shaw Ave. Estimated cost, $200,000.

DALLAS, TEX.—We are officially advised that Hella Temple, Ancient Arabic Order of the Mystic Shrine, will erect temple and auditorium, to cost about $125,000. The building will be one story high, 175 × 250 ft., or 200 × 200 ft., fireproof. Bids will be received probably about March 1. John G. Hunter, Commerce and Lamar Sts., is Chn. of Com. in charge of organizing stock company, selecting plans, etc.

*FORT WORTH, TEX.—Bids are asked until 3 p. m., Dec. 21, by James Knox Taylor, Superv. Arch., Washington, D. C., for installation of plumbing, gas piping, etc., in the extension of the U. S. postoffice at Fort Worth.

OKLAHOMA CITY, OKLA.—Chicago, Rock Island & Pacific Ry. Co., J. B. Berry, Chief Engr., Chicago, Ill., and St. Louis & San Francisco R. R. Co., J. F. Hinckley, Chief Engr., St. Louis, Mo., will erect union station in Oklahoma City, to be built of pressed brick and stone. Cost, about $300,000. ROBERT MEE has contract to remove 11 houses located on the property, and excavation will begin within about 60 days.

DENVER, COLO.—F. W. Paroth, Arch., has filed plans for erection of an orphanage at West 29th Ave. and Osceola St., by the Franciscan Sisters. It is estimated that it will cost more than $100,000.

*SEATTLE, WASH.—We are advised by Arthur H. Markwart, C. E., of Howard & Galloway, Archs. and Engrs., Administration Bldg., Alaska-Yukon-Pacific Exposition, that the University of Washington is to erect three permanent buildings on the exposition grounds, which grounds are a part of their campus. These buildings are as follows: Engineering, Chemistry and Auditorium, which will be used by the Exposition authorities as the Machinery, Fine Arts Buildings and Auditorium respectively. The Engineering Building will be of mill construction; the Chemistry of steel frame, concrete floors, fireproof throughout, and the Auditorium of wood and steel interior. The walls of the buildings are to be of brick, with a buff pressed brick exterior. The construction contract has been let to the WESTLAKE CONSTRUCTION CO., 717 Locust St., St. Louis, Mo., with Seattle office in the Lowman Building.

The first exhibit building to be erected by the Exposition Co. is the Manufacturers'. Working plans and specifications were prepared by Howard & Galloway, and Somerville & Cote, Associate Archs., Penney Bldg. The successful bidder was STREHLOW, FREESE & PETERSEN, Arcade Annex, Seattle. Plans are being rapidly prepared for other buildings, which are, like this one, of a temporary nature and used particularly for exposition purposes.

SPOKANE, WASH.—The I. O. O. F. contemplates the erection of a 6 or 8-story building at a cost of about $250,000. The two or three upper floors will be retained for lodge purposes. No plans have yet been made. George A. Lovejoy is Past Grand Secy., 1201 Broadway Ave.

SAN FRANCISCO, CAL.—According to press reports, steps will be taken at once to erect the following buildings: A 12-story building at Post and Montgomery Sts. by the First National Bank directors to cost $1,250,000; D. H. Burnham & Co., Merchants' Exchange Bldg., are Archs.; a 10-story brick building at Bush and Battery Sts., to cost $275,000, by Miss J. E. Crocker.

MONTREAL, QUE.—The proposed custom-house for Montreal will cost $3,000,000, it is stated. The building lot is bounded by McGill St., Youville Sq., Youville and Normand Sts. Fred Gelinas is Secy. Dept. Pub. Works, Ottawa, Ont.

COQUITLAM, B. C.—The British Columbia Government intends erecting a provincial asylum at Coquitlam, B. C., to cost about $200,000. Hon. F. J. Fulton is Provincial Secy., Victoria.

WATER SUPPLY—IRRIGATION.

(denotes that this work is advertised in Engineering News.)*

NEW YORK, N. Y.—Bids are asked until 2 p. m., Dec. 11, by John H. O'Brien, Comr. of Water Supply, Gas and Electricity, for furnishing, delivering and erecting a system of water curtains, with all piping, valves, manifolds, sprinkler heads, brackets, supports and all other appurtenances, complete, in place and ready for operation in the high pressure pumping stations located at Oliver and South Sts., and at Gansevoort and West Sts., Boro. of Manhattan.

DURHAMVILLE, N. Y.—The following bids were received on Nov. 26 by F. C. Stevens, Supt. Public Works, Albany, for constructing an aqueduct for the Erie Canal, near Durhamville, N. Y.: Theodore F. Kalbfleisch, Glens Falls, N. Y., $56,093; N. D. Peters, Utica, N. Y., $60,532; The Foundation Co., 115 Broadway, New York, $63,316; Casey & Murray, Rochester, N. Y., $60,389; Marcellus & Ballard, Oneida, N. Y., $69,530. Engineer's estimate, $46,455. Itemized prices may be found under Contract Prices, this issue.

VERONA, N. J.—A water-works system may be constructed here, the citizens having voted on Nov. 14 in favor of this improvement. T. E. Brooks is Boro. Clk.

PHILADELPHIA, PA.—THE ALLIS-CHALMERS CO., Milwaukee, Wis., was awarded the contract on Nov. 18 by George R. Stearns, Dir. Pub. Wks., for the erection of a 6,000,000-gal. pump at the Belmont high-service pumping station, at $33,000.

ZELIENOPLE, PA.—Bonds for $10,000 have been voted for the construction of a system at this post.

FAYETTEVILLE, W.VA.—The Fayetteville Water & Light Co. has been incorporated with $25,000 capital stock by Joseph Hawkins and others. It is proposed to build a 25-ft. dam on Wolf creek about one mile from this city and pump water to reservoir located on the hill in the west end of the city. The company has secured a 50-year franchise; water rights and other preliminaries have been arranged and construction work will soon begin.

DALLAS, GA.—A bond issue of $30,000 for the installation of water-works has been authorized by a vote of the citizens.

PALATKA, FLA.—This city has voted $10,000 of bonds for the completion of the water-works system.

FORT BARRANCAS, FLA.—JOSEPH L. SWIEGARD has been awarded the contract at $7,830 for furnishing additional machinery in pump house and extending water system at this post.

EGMONT, FLA.—Bids are asked by the Constructing Quartermaster, Fort Dade, Fla., in triplicate, until 8 p. m., Dec. 19, for constructing three cypress cisterns at this post.

BAY MINETTE, ALA.—Bids are asked until noon, Dec. 9, by the County Commissioners of Baldwin County for the construction of water-works and closets for the court house of Baldwin County, located at Bay Minette, Ala.; also for building fence around court house. Bidder may bid on water-works, closets and fencing, with amount of bid on water-works and fencing separate. J. H. H. Smith is Judge of Probate, Baldwin County, and ex-officio Clk. of Baldwin County.

MADISONVILLE (Cincinnati post-office), OHIO.—Bonds for $35,000 have been voted for extending the water-works mains.

AURORA, ILL.—Bids are asked until Jan. 17, by the Board of Public Works for a new air compressor for the pumping station.

ATLANTIC, IOWA.—Bids are asked until 7.30 p. m., Dec. 7, by T. E. Nichols, City Clk., for the following work: (1) Drilling two wells 8 or 10 ins. in diameter and 50 ft. or deeper as the supply of water warrants. (2) Casing, valves and fittings for 8 or 10-in. wells and 8 or 10-in. cast-iron pipe to connect wells with suction main. (3) 1,000 or less water meters ranging in sizes from ⅝-in. to 2-in. (4) 1 high duty pumping engine capable of lifting water from depth of 26 ft. and against a head of 90 to 160 lbs. and pump 700,000 gals. in twenty-four hours. (5) One triplex or power pump to be driven either by steam engine operating under 80 lbs. boiler pressure or by electric motor and capable of lifting water from a depth of 26 ft. and against a head of 90 to 160 lbs. and pump 700,000 gals. in twenty-four hours.

MUSCATINE, IOWA.—Bids are asked until noon, Dec. 7, by A. S. Lawrence, County Audr., Muscatine County, for excavating ditches in Drainage District No. 3, and for furnishing and placing additional c.-i. pipes or concrete conduits at cross levee in Sections 5 and 6.

FARGO, N. DAK.—Bids are asked until 5 p. m., Dec. 2, by N. C. Morgan, City Audr., for the construction of a 6-in. water main in Ninth Ave., North, from Seventh St., North, to 13th St., North, in Water Main Dist. No. 2. Samuel F. Crabbe is City Engr.

GRAND FORKS, N. DAK.—J. M. CARROL was awarded the contract on Nov. 15 by the City Council for the construction of a water main extension of one block in Packingham Ave., at $1.60 per lin. ft. J. J. Smith is City Engr.

BROOKFIELD, MO.—This city has voted $11,000 of bonds for the improvement of the water-works system.

SULPHUR SPRINGS, ARK.—See under Light and Power Plants.

GREELEY, COLO.—W. R. Wilson, Denver, will build the Chain of Lakes reservoir system, consisting of four reservoirs and ditches, 20 miles east of Greeley. The total capacity of the reservoirs will be 80,000,000 cu. ft. and the source of supply will be the draining of land lying northwest of them.

SEATTLE, WASH.—We are officially advised that SANFIELD & GIFFORD have been awarded the contract by the Board of Public Works for laying water mains in Sixth Ave., Northwest, and other streets, at $32,668. R. H. Thomson is City Engr.

The ordinance authorizing the construction of a system of high pressure salt water mains in the business portion of the city, to be used for fire protection, was passed by the City Council last night. Estimated cost, $340,000. R. H. Thomson is City Engr.

HERMISTON, ORE.—THOMAS JACQUES, Pilot Rock, has been awarded the contract for 82,000 yds. of laterals under the Umatilla irrigation project at 13 cts. per yd. The work is all in the vicinity of Hermiston and will begin at once. This is the second big contract awarded to Mr. Jacques under this project.

OCEANSIDE, CAL.—We are officially advised that the following bids were received on Nov. 5 by the Board of Trustees for one horizontal return tubular boiler 48 ins. in diameter and 16 ft. long, and one cross-compound, high-duty Corliss pumping engine of 1,000 gals. capacity: PACIFIC COAST MFG. CO., 126 South Los Angeles St., Los Angeles, $16,862 (awarded contract), Baker Iron Works, 932 Buena Vista St., Los Angeles, $13,266; S. J. Smith Machinery Co., 129 North Los Angeles St., Los Angeles, $11,968; H. D. Brodie is City Clk. H. N. Tracy, Los Angeles, is Consulting Engr. in Charge.

PHOENIX, ARIZ.—Bids are asked by Robert Craig, Supt. of Water-works, until 3.30 p. m., Dec. 2, for the following work: Furnishing all material and labor for completion of contemplated improvements.

WINNIPEG, MAN.—We are officially advised that the time for submitting bids for furnishing 15 miles of assorted water-pipe has been extended by the Board of Control until Jan. 15. Bids were asked until Nov. 15. Magnus Peterson is Secy. Bd. H. N. Ruttan is City Engr.

SEWERAGE.

(denotes that this work is advertised in Engineering News.)*

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Dec. 11, by Bird S. Coler, Boro. Pres., for constructing a sewer and sewer basins in various streets.

SCRANTON, PA.—O'BOYLE BROS. were awarded the contract on Nov. 19 by the City Council for the construction of the Drinker St. sewer, at $3,108. James Langan is City Engr.

READING, PA.—The following contracts for (A) the construction of the Rose Valley Creek sewer system, (B) the construction of the house sewer in District No. 12, (C) the construction of the northeastern storm sewer, were awarded on Nov. 20 by the Board of Public Works: (A) JOSEPH P. O'REILLY, at about $17,800; (B) JOSEPH P. O'REILLY, at $74,101; (C) DAVID B. PEOPLES, at $18,601. Ebner H. Beard is City Engr.

NEW CASTLE, PA.—Specifications for the construction of sanitary sewers on O'Brien, Fulton, Davis, Moravia and Winter Sts. have been approved by the Sewer Committee.

FT. DUPONT (Delaware City post-office), DEL.—We are officially advised that the following bids were received on Nov. 25 by Capt. J. L. Knowlton, Constructing Quartermaster, Ft. Dupont, for remodeling (a) the sewer system, and (b) installing two sewage ejectors and ejector chamber: Joseph Anderson, Delaware City, (a) $4,924; Harry A. Miller, Wilmington, Del., (a) $7,780, (b) $7,195; M. B. Bunyea, Chester, Pa., (a) $7,300, (b) $7,900.

WASHINGTON, D. C.—Bids were received as follows on Nov. 25 at the office of the Commissioners of the District of Columbia, for the construction of sewers: (a) W. F. Brenizer Co., Washington, D. C. (b) R. J. Beall Construction Co., Washington, D. C. (c) E. G. Gummel, Washington, D. C. Ordinary excavation, (a) 62 cts.; (b) 85 cts.; (c) 70 cts. Sewer brick masonry, (a) $14; (b) $18; (c) $5. Vitrified brick masonry, (a) $21.50; (b) $24; (c) $21. Concrete masonry "B", (a) $8.75; (b) $10.50; (c) $8. Concrete masonry "C," (a) $9.10; (b) $10; (c) $8.

*LOUISVILLE, KY.—Plans and specifications are on file at the office of Engineering News, New York, for the construction of Section "B" of the Southern Outfall Sewer Contract No. 2. Bids are asked until Dec. 17.

COLUMBUS, OHIO.—Bids are asked until noon, Nov. 29, by Board of Public Service for the construction of sewers in various alleys.

HAMILTON, OHIO.—The MASSILON STEEL AND IRON CO. has been awarded the contract for 6-in. sewer pipe at $32 per ton and for 4-in. sewer pipe at $32.70 per ton.

DAYTON, OHIO.—Bids are asked until Dec. 4 by the Board of Public Service, T. M. Pexton, Pres., for constructing sanitary sewers in part of Dist. No. 3, New Dayton, requiring 40,050 ft., 6 to 15-in. vitrified pipe sewers, 68,250 ft. trench and backfill 6 to 28 ft. deep, 80 lamp holes, 75 flush tanks, flush tank connections, repaving tanks, yds. brick pavement, 100 sq. yds. asphalt, 6,000 lin. ft. boulder repaving, and specials, etc.

GIRARD, OHIO.—The contract for constructing a portion of the main sewer, bids opened Nov. 5, has been awarded to C. L. ALLEN, Marion, O., at $19,32[illegible]. E. L. Hauser is City Clk.

CINCINNATI, OHIO.—The following are the bids opened on Nov. 8 by the Board of Public Service for constructing sewers on Western Ave. and Bridge St.: [illegible] Connelly Construction Co., $8,031; [illegible] Kirchner Construction Co., $9,062; A. J. [illegible] Henkel, $9,142; J. E. Mahoney, $9,523. [illegible] Charles N. Danenhower is Ch. Engr. Bd.

TOLEDO, OHIO.—Bids are asked until noon, Dec. 9, by the Board of Public Service for the construction of Local Sewers Nos. 1011 and 1014. Reynold Vo[illegible] is Secy. Bd.

AKRON, OHIO.—Bids are asked until noon, Dec. 3, by the Board of Public Service for the construction of a sewer in Bloomfield Ave. from Portage Path to a point 125 ft. from Exchange St., with all the necessary catch basins, lamp holes, manholes, ventilators and appurtenances. Charles H. Watters is Secy. Bd.

STEUBENVILLE, OHIO.—Bids are asked until noon, Dec. 9, by the Board of Public Service for the construction of a sewer in Market St., from Liberty St. to the first alley west of Liberty St. T. W. Vance is Clk. Bd.

*SPRINGFIELD, OHIO.—Bids are asked until noon, Dec. 18, by the Board Public Service for the construction of that portion of the high level intercepting sewer lying in Main St., between Walter St. and Western Ave.; in Western Ave., between Main and Columbia St.; in Columbia St., between Western Ave. and Light St.; in Light St., between Columbia and North Sts.; in North St., between Light and Factory Sts.; in Factory St., between North and Main Sts.; the amount of work being approximately as follows: 2,096 ft. 24-in. vitrified pipe, plain or reinforced concrete sewer; 5,554 ft. 30-in. vitrified pipe, plain or reinforced concrete sewer; 2,166 ft. 33-in. vitrified pipe, plain or reinforced concrete sewer; 9,376 ft. 6-in. pipe house connections, average depth 10 ft.; 71 6-in. on 24-in. Y branches; 158 6-in. on 30-in. Y branches; 64 6-in. on 33-in. Y branches; 800 ft. 8-in. sanitary sewer; 50 ft. 18-in. sanitary sewer; 10 ft. 30-in. sanitary sewer; 32 round manholes, 4 ft. inside diameter, average depth 12 ft.; eight single drop manholes; one double drop manhole; one regulator as per plan; 41 manhole covers and frames; 475 manhole steps; 115 cu. yds. Class A concrete; 17,875 cu. yds. rock excavation.

INDIANAPOLIS, IND.—Plans for a sewer 2 1-3 miles in length in 26th St., have been submitted to the Board of Public Works. A portion of it will be 3 ft. in diameter, constructed of brick or concrete. Estimated cost, $25,000. Blaine H. Miller is City Engr.

GRAND RAPIDS, MICH.—Plans are being prepared by L. W. Anderson, City Engr., for an 8-ft. trunk sewer to form a continuation of the Broadway sewer and two pumping stations on the West Side. Estimated cost, $90,000.

BLOOMINGTON, ILL.—Bids are asked by Board of Local Improvements at the office of Chas. F. Fauntz, City Engr., until Nov. 29, for 3,147 ft. of 12-in. pipe sewer, 1,478 ft. of 12-in. pipe sewer and 580 ft. of 18-in. pipe sewer.

SPRINGFIELD, ILL.—RICHARD F. EGAN was awarded the contract on Nov. 14 by the Board of Local Improvements for the construction of a sewer in North Grand Ave., from First St. to West Grand Ave., at 90 cts. per ft. for 18-in. pipe sewer, 50 cts. per ft. for 12-in., 40 cts. per ft. for 12-in. inlets and manholes $25 each.

LUVERNE, MINN.—The City Council on Nov. 5, awarded the contract for the construction of sewers to GREENE & DELATE, at 65 cts. lin. ft. for sewer; manholes, each, $60 and flush tanks, each, $90.

ST. PAUL, MINN.—The General Contracting Co. was the lowest bidder for the construction of the St. Anthony Park sewer system, at $217,000. G. A. Johnson is City Engr.

WELLINGTON, KAN.—Plans for a sewer system for this place are practically completed. Bids for construction will be asked soon.

FREDONIA, KAN.—Burns & McDonnel, Dwight Bldg., Kansas City, Mo., are preparing plans for a sewerage system. Estimated cost, between $40,000 and $50,000. R. S. Spencer is City Clk.

LINCOLN, NEB.—Bids are asked until noon, Nov. 29, by Thomas H. Pratt, City Clk., for the construction of the sewers in Sewer Dist. No. 45.

VALLEY CITY, N. DAK.—Bids are asked until Dec. 2, by the City Council for constructing sewers in two alleys. H. F. Halverson is City Audr.

PRAIRIE VIEW, TEX.—Bids will probably soon be asked by the Board of Directors of the Agricultural and Mechanical College for the construction of a sewer system at the Prairie View Normal School. Estimated cost, about $5,000. C. E. Andrew, College Station, Tex., is Secy. Bd. of Directors.

EDMONTON, ALTA.—Extensions to the sewer and water-works systems are contemplated, $96,000 having been voted for these improvements. R. R. Keely is City Engr.

RENO, NEV.—Bids are asked until Dec. 9, by the City Clerk for excavation and backfilling necessary for laying the south side sewer system.

RED DEER, ALTA.—Money by-laws have been submitted by the Town Council for the purpose of raising $17,300 for water-works and sewerage systems. L. C. Fulmer is Secy.-Treas.

GARBAGE DISPOSAL.

(* *denotes that this work is advertised in Engineering News.*)

PROVIDENCE, R. I.—Bids will probably soon be asked by the Board of Aldermen for the collection of swill and house offal. Otis F. Clapp is City Engr.

*FORT HANCOCK, N. J.—Plans and specifications are on file at the office of Engineering News, N. Y., for the construction of a garbage crematory. Bids are asked until Dec. 17.

*COLUMBUS, OHIO.—Bids are asked until noon, Jan. 14, by the Board of Public Service for the design, construction, delivery and erection of a garbage reduction works complete, the works to have a capacity of 100 tons per 24 hrs. E. F. McGuire is Secy. Bd. Henry Maetzel is Ch. Engr. Dept. Pub. Ser.

OLYMPIA, WASH.—Plans are being formulated for the construction of a garbage disposal works.

SAN DIEGO, CAL.—This city may have a garbage crematory, H. L. Emerson, Denver, Colo., having made a proposition to the Board of Health to install a garbage crematory and look after the collection of garbage. Estimated cost of installing plant, $25,000.

STREETS AND ROADS.

(* *denotes that this work is advertised in Engineering News.*)

NEW YORK, N. Y.—The lowest bid opened on Nov. 7 at the office of the Pres. of Manhattan Boro. for regulating and repaving with asphalt on a concrete foundation Madison Ave. from 23d to 32d St., was submitted by the Sicilian Asphalt Co., 41 Park Row, at the following prices: 11,000 sq. yds. asphalt pavement, including binder course, $1.35; 1,000 cu. yds. concrete, $5.50; 1,750 lin. ft. new bluestone curb, 90 cts.; 200 lin. ft. curb, 40 cts.; 37 noiseless covers, complete, for sewer and water manholes, each $20; total, $22,745. Other bidders were: Barber Asphalt Co., 114 Liberty St., $24,465; Uvalde Asphalt Co., 1 Broadway, $29,295.

The lowest bid opened on Nov. 7, at the office of the Pres. of Manhattan Boro. for regulating and repaving with granite block on concrete foundation the roadway of 10th Ave., from Little West 12th St. to 23d St., was submitted by John E. Quinn, Brooklyn, at the following prices: 15,914 sq. yds. granite block pavement, with paving cement joints, $2.44; 15,914 sq. yds. old stone blocks, to be purchased by contractor and removed, 7 cts.; 3,054 cu. yds. concrete, $5.10; 4,770 lin. ft. new bluestone curb, 78 cts.; 100 lin. ft. old bluestone curb, reset, 50 cts.; 17 new sewer manhole heads and covers, $14; 15 new water manhole heads and covers, $20; 7,130 sq. ft. new granite bridgestone, 70 cts.; total, $62,540. Other bidders were: Sheehan Construction Co., $63,570; Republic Construction Co., 180 Broadway, $64,977; George & Farrell, Brooklyn, $65,617; Atlanta Construction Co., 432 East 91st St., $64,370; Jas. Quinn, Jr., $62,825.

The following are the bids opened on Nov. 14, by the Park Board, for furnishing and constructing material, granolithic and brick sidewalks and granite curb on concourse and approach to Baird Court, in the New York Zoological Park, in Bronx Park: Bart Dunn, $17,254; Kelly & Kelley, $15,933; John B. Malatesta, $13,699; Michael Marrone, $17,975; W. H. Masterson, $18,427; McHarg-Barton Co., $17,700; Murray Contracting Co., Inc., $17,484; John V. Schaefer, Jr., & Co., $15,360; Thompson & Kelsey, $18,400.

SYRACUSE, N. Y.—The following contracts for paving were awarded on Nov. 18 by the Board of Contract and Supply for paving Borden Ave., from South Salina St. to Midland Ave., with asphalt: the WARNER-QUINLAN ASPHALT PAVING CO., at $13,989; for paving Waverly Ave., from Walnut Ave. to Comstock Ave., with Johnsonburg block, the CENTRAL CITY PAVING CO., at $4,610. Henry C. Allen is City Engr.

ALBANY, N. Y.—The following are the bids received by Frederick Skene, State Engr. and Surv., Albany, on November 18th, for the improvement of State highways:

Seneca River-North Side Road, No. 273, Seneca County, 1.301 miles: Chambers & Grady, Rochester, $14,886.

New Paltz-Rifton Road, No. 308, Ulster County, 4.150 miles: Joseph Walker, Stone Ridge, N. Y., $43,010; Stewart-Kerbaugh-Shanley Company, 527 Fifth Ave., New York, $45,570.

Canajoharie-Sprout Brook Road, No. 345, Montgomery County, 4.66 miles: Brown & Lowe, Schenectady, N. Y., $41,278; Stewart-Kerbaugh-Shanley Co., New York, $38,611.

[illegible] Road, No. 355, Montgomery County, 4.512 miles: Bennett & Ryan, Silver Creek, N. Y., $[illegible]2,923.

[illegible]-Corning Road, No. 358, Chemung County, [illegible].143 miles: Bennett & Ryan, Silver Creek, N. Y., $79,537; Casey & Murray, Rochester, N. Y., $77,954.

Walden-Pine Bush Road, No. 382, Orange County, 6.570 miles: DeGraff & Hogaboom, Bloomington, N. Y., $59,943; Orange County Road Construction Co., 120 Broadway, New York, $57,610; D. Moynehan, Herkimer, N. Y., $58,359; Stewart-Kerbaugh-Shanley Co., New York, $57,547.

Clarendon-Holly Road, No. 391, Section 1, Orleans County, 4.537 miles: Greece Construction Co., Rochester, N. Y., $25,136; Chambers & Grady, Rochester, N. Y., $31,832; Henry P. Burgard Co., Buffalo, N. Y., $[illegible]388; Stewart-Kerbaugh-Shanley Co., New York, $28,632.

County Line Road, No. 398, Orleans and Monroe Counties, 5.550 miles: Greece Construction Co., 718 Chamber of Commerce Bldg., Rochester, N. Y., $30,809; Stewart-Kerbaugh-Shanley Co., New York, $30,342.

Rapids-Rochester Road, No. 401, Monroe County, 1.900 miles: Jeremiah T. Finch, Glens Falls, N. Y., $32,587; Whitmore, Rauber & Vicinus, Rochester, N. Y., $27,171.

Buffalo Road, No. 402, Section 3, Monroe County, 3.620 miles: Greece Construction Co., Rochester, N. Y., $24,806; Gantz-Wilson Construction Co., Buffalo, N. Y., $29,797; Chambers & Grady, Rochester, N. Y., $30,274; Whitmore, Rauber & Vicinus, Rochester, N. Y., $29,696.

Churchville-Riga Road, No. 403, Monroe County, 2.080 miles: Patrick A. Lillis, Troy, N. Y., $17,413; Greece Construction Co., Rochester, N. Y., $17,552; Chambers & Grady, Rochester, N. Y., $20,050.

Rich's Dugway-Penfield Road, No. 408, Monroe County, 2.450 miles: Monroe Roads Co., Rochester, N. Y., $24,398; Whitmore, Rauber & Vicinus, Rochester, N. Y., $27,179; Patrick A. Lillis, Troy, N. Y., $23,790.

West Point-Cornwall Road, No. 411, Orange County, 2.470 miles: Casey & Murray, Rochester, N. Y.; Elmore & Hamilton, Schenectady, N. Y.; Orange County Road Construction Co., New York; Bellew & Merritt Co., Tuckahoe, N. Y.; Robinson-Gerhart Co., Park Row, New York; Stewart-Kerbaugh-Shanley Co., New York. (Owing to great differences in bids on this road, bids will probably be rejected.)

Conklin Road, No. 421, Broome County, 7.831 miles: Casey & Murray, Rochester, N. Y., $58,766; A. D. Bridge's Sons, Hazardville, Conn., $58,852.

State Road, No. 426, Section 2, Jefferson County, 4.047 miles: William J. Semper, Watertown, N. Y., $48,231.

Watertown-Carthage Road, No. 428, Jefferson County, 4.882 miles: William J. Semper, Watertown, N. Y., $35,863; Burns Bros. & Haley, Watertown, N. Y., $37,872; Stewart-Kerbaugh-Shanley Co., New York, $32,047.

Lisle-Center Lisle Road, No. 445, Broome County, 2.700 miles: J. McCormick, East Providence, R. I., $29,144.

Old Forge-McKeever Road, No. 462, Herkimer County, 11.020 miles: Pennell & Hern, Yonkers, N. Y., $71,210; Brown & Lowe, Schenectady, N. Y., $99,840; P. A. Herlihy, Glens Falls, N. Y., $110,307; Casey & Murray, Rochester, N. Y., $70,664; D. Moynehan, Herkimer, N. Y., $74,979.

Clover Street Road, No. 474, Section 2, Monroe County, 1.950 miles: Monroe Roads Co., Rochester, N. Y., $14,736; Patrick A. Lillis, Troy, N. Y., $14,695; Whitmore, Rauber & Vicinus, Rochester, N. Y., $16,035.

Valley Falls Road, No. 477, Rensselaer County, 6.580 miles: Patrick A. Lillis, Troy, N. Y., $43,371; Thomas H. Karr, Troy, N. Y., $43,596; Michael F. Dollard, Albany, N. Y., $49,405; Stewart-Kerbaugh-Shanley Co., New York, $47,500.

Haynersville-Raymertown Road, No. 478, Rensselaer County, 3.210 miles: Corliss Construction Co., Troy, N. Y., $27,227; Patrick A. Lillis, Troy, N. Y., $25,280; Brown & Lowe, Schenectady, N. Y., $29,363; Martin Murray, Troy, N. Y., $27,068; Thomas H. Karr, Troy, N. Y., $25,717; Morris Kantrowitz, Albany, N. Y., $25,970; Stewart-Kerbaugh-Shanley Co., New York, $28,132.

Fairport Road, No. 479, Section 2, Monroe County, .270 mile: Monroe Roads Co., Rochester, N. Y., $3,392; Whitmore, Rauber & Vicinus Co., Rochester, N. Y., $3,434; Patrick A. Lillis, Troy, N. Y., $3,376.

West Bloomfield-Honeoye Falls Road, No. 485, Ontario County, 3.760 miles: Burt Warren, Honeoye Falls, N. Y., $26,415; Henry P. Burgard Co., Buffalo, N. Y., $30,913.

Tully Road, No. 489, Onondaga County, 4.440 miles: Chambers & Grady, Rochester, N. Y., $36,365; Stewart-Kerbaugh-Shanley Co., New York, $36,269.

Hoosick-North Hoosick Road, No. 490, Rensselaer County, 6.360 miles: Michael Fitzgerald, Hoosick Falls, N. Y., $24,127; Thomas H. Karr, Troy, N. Y., $24,969; Patrick A. Lillis, Troy, N. Y., $24,107; Brown & Lowe, Schenectady, N. Y., $34,312; Stewart-Kerbaugh-Shanley Co., New York, $25,779.

Base Line-Grand Island Road, No. 531, Section 2, Erie County, 2.590 miles: Gantz-Wilson Construction Co., Buffalo, N. Y., $23,150; Stewart-Kerbaugh-Shanley Co., New York, $18,195.

Base Line-Grand Island Road, No. 532, Section 3, Erie County, 1.870 miles: Gantz-Wilson Construction Co., Buffalo, N. Y., $14,891; Stewart-Kerbaugh-Shanley Co., New York, $10,425.

BUFFALO, N. Y.—Bids are asked until 11 a. m., Dec. 6, by the Commissioners of Public Works for paving with asphalt or brick: Detroit St., 28 ft. wide, from Howard St. to William St.; Holt St., 26 ft. wide, from Indian Reservation line to east end of Holt St.; and for repaving: Lafayette Ave., 40 ft. wide, from Niagara to Boynes St.; Pine St., 32 ft. wide, from Cypress to Syracuse Sts.; Bean Alley, 16 ft. wide, from Mohawk to Huron Sts. Francis G. Ward is Comr. Pub. Wks.

BROOKLYN, N. Y.—Bids are asked until 11 a. m., Dec. 11, by Bird S. Coler, Boro. Pres., for regulating and repaving various streets.

*SALEM, N. J.—Bids are asked until 8 p. m., Dec. 10, by the Road Committee of the Board of Chosen Freeholders, at the Court House, Salem, for grading and placing oyster shells on the Mannington Road, 1.58 miles, in the township of Mannington. John F. Ayars is Dir. Bd.

*CAMDEN, N. J.—Bids are asked until 11 a. m., Dec. 9, by the Board of Chosen Freeholders in the Court House, Camden, for the construction of a gravel road from Berlin to Tansboro, a distance of 2.33 miles. Alfred L. Sayers is Dir. Bd.; J. J. Albertson is County Engr.

MALAGA, N. J.—The contract for the construction of the Malaga and Downstown Road has been awarded to J. SHEPPARD FISHER, Clayton, at $12,011. Other bidders were: Mathers Co., $14,509; B. F. Sweeten & Son, $16,243.

WOODBURY, N. J.—We are officially advised that the following bids were received on Nov. 25 by John E. Estell for paving South Broad St.; 2,950 sq. yds. Warren's bitulithic pavement: Standard Bitulithic Co., New York, $2.25 per sq. yd.; Columbia Paving Co., Geneva, N. Y., $2.45 per sq. yd.

McKEESPORT, PA.—Bids are asked by C. E. Soles, City Controller, until 4 p. m., Dec. 3, for grading, curbing and paving with vitrified brick, Scott St.

AVALON (Allegheny post-office), PA.—Bonds for $75,000 have been voted for street improvements.

NORRISTOWN, PA.—Bonds for $300,000 have been authorized for street improvements.

WILMINGTON, DEL.—We are officially advised that the following bids were received on Nov. 26 by Francis A. Price, State Highway Comr., for the construction of 2.64 miles of macadam road between this city and New Castle Hundred. AMERICAN ASPHALT CO., $20,498 (awarded contract); Dawson & Davis, $23,204; B. F. Wickersham, $24,500; F. W. Bourneman, $20,578.

DECATUR, ALA.—An ordinance providing for the construction of over seven miles of concrete sidewalks has been passed by the Decatur City Council.

PROVIDENCE, LA.—Bids are asked until December 17 for paving and curbing about four miles of sidewalks.

CINCINNATI, OHIO.—Bids are asked by the Board of Public Service, M. J. Keefe, Clk., until noon, Dec. 2, for improving the following streets: St. Lawrence Ave., by setting 1,580 lin. ft. of sandstone curb, grading, paving portion of roadway with granite block on Portland cement, concrete base and broken stone. Estimated cost, $10,081. Valencia St.: by grading, setting 1,100 lin. ft. of sandstone, and paving roadway with vitrified brick on hydraulic cement, concrete foundation. Estimated cost, $4,813. Duck Creek Road and Fairview Ave.: the estimated quantities of work being 100 lin. ft. cement sidewalk, 2,000 cu. yds. grading, 135 cu. yds. dry masonry, 800 sq. yds. riprap paving. Estimated cost, $3,600. McMicken Ave.: the estimated quantities of work being 175 cu. yds. broken stone, 698 cu. yds. Portland cement concrete, 230 cu. ft. curb reset, 1,000 cu. yds. trench excavation, 230 lin. ft. gutter flag, 1 inlet readjusted, 1,188 cu. yds. concrete rubble masonry. Estimated cost, $10,000.

Bids are asked by the Board of Public Service until noon, Dec. 4, for improving Sunset Ave. by grading, setting 2,260 lin. ft. sandstone curb, and paving 3,960 sq. yds. of vitrified brick on hydraulic cement foundation. Estimated cost, $10,851. C. N. Dannenhower is City Engr.

NORWOOD (Cincinnati post-office), OHIO.—Bids are asked by the Board of Public Service until noon, Dec. 14, for grading and macadamizing roadway and constructing concrete curbs and gutters, drains, etc., in sundry streets.

STEUBENVILLE, OHIO.—Bids will probably soon be asked for the improvement of Market St. by paving with Hillside block. W. M. Trainer is City Clerk.

ASHTABULA, OHIO.—The City Council has voted to have plans and specifications prepared by the engineering department for grading and draining Manning St., from Columbus to Cole St., and Second St., from Columbus St. to the property of the Lake Shore & Michigan Southern Ry. Co.

Plans and specifications have been prepared by the engineering department for grading and draining Pennsylvania Ave., from Walnut to Hubbard Sts., and Madison St., from Holly to South St.

SULLIVAN, IND.—Bids are asked until noon, Dec. 2, by E. E. Russell, County Audr., for the construction of 15,400 ft. of gravel road in Haddon Township.

DANVILLE, IND.—Bids are asked by David D. Mills, County Audr., until 10 a. m., Dec. 5, for the construction of 1¼ miles of gravel road in Marion Township.

JACKSON, MICH.—Bids will probably soon be asked for paving W. Main and First Sts. A. W. D. Hall is City Engr.

CADILLAC, MICH.—Bids may soon be asked for paving with brick, bitulithic and concrete 23,888 sq. yds.

BLOOMINGTON, ILL.—Bids are asked by the Board of Local Improvements, at the office of the City Engineer, until 2 p. m., Nov. 29, for brick pavement and combined curb and gutter on Walnut St.

BEARDSTOWN, ILL.—J. E. BRETZ, Springfield, has been awarded the contract by the Board of Improvements for paving 37 blocks of streets with brick, at about $80,000.

CAIRO, ILL.—JOHN HOGAN has been awarded the contract for repairing the section of county road in the vicinity of Lake Creek, north of Beech Ridge at $1.35 per cu. yd. of gravel used. Wilbur B. Thistlewood is City Engr.

CEDAR RAPIDS, IOWA.—Bids are asked by the Board of Public Improvements, until 10 a. m., Nov. 28, for paving with vitrified repressed brick blocks First St., from Fifth to Sixth Aves., also Sixth Ave., from First to Second Sts. F. W. Barta is Chn. Bd.

ST. PETER, MINN.—Bids are asked until Nov. 29 by the Board of County Commissioners for grading and graveling the State Road in the towns of Traverse, Bernadotte and Lake Prairie. A. H. Freeman is County Audr.

CUSHING, MINN.—Bids are asked by Ole Whal, Comr. Morrison County, until 10 a. m., Nov. 30, for road work on the State Road.

SOUTH OMAHA, NEB.—The following contracts were awarded on Nov. 12 by the City Council: For grading 19th St., DUGAN & NOYLON, at 13¾ cts. per cu. yd.; for grading 20th St., LAMREAUX & PETERSON, at 15 cts. per sq. yd.; for paving Q St., from 20th to 24th Sts., the NATIONAL CONSTRUCTION CO., at about $16,175.

JAMESTOWN, COLO.—Bids are asked by T. W. Jaycox, State Engr., Denver, until noon, Dec. 7, for the construction and repair of 1⅔ miles of county wagon road, from Jamestown to Allen Park.

SEATTLE, WASH.—We are officially advised that the following contracts have been awarded by the Board of Public Works: For grading the alley in Block A, Rowe's first addition, J. S. KENYON & CO., at $3,270; for paving Jackson St. with brick, H. F. JAHN & CO., at $6,102. R. H. Thomson is City Engr.

KIRKLAND, WASH.—All the bids received by the State Highway Commissioners for the construction of the East trunk road from Kirkland to Sumamish Lake, a distance of 3½ miles, have been rejected as excessive. The Engineer's estimate was $22,400.

*SALT LAKE CITY, UTAH.—Bids are asked until 8 p. m., Jan. 3, by the Board of Public Works, for grading, curbing and paving First South St., from Second East St. to 13th East St. F. J. Leonard is Chn. Bd. Louis C. Kelsey is City Engr.

MANUFACTURING PLANTS.

(* *denotes that this work is advertised in Engineering News.*)

BUFFALO, N. Y.—The New York Central & Hudson River R. R. Co. will erect a roundhouse on the east side of Bailey Ave., south of the West Shore Division tracks, at a cost of $120,000. Contract for the work has been let to L. B. MILLIKEN, State Life Bldg., Indianapolis, Ind.

COLLINGSWOOD, N. J.—A. QUINTO, 524 Pine St., Philadelphia, has the contract for erecting a 2-sty factory building, at Collingswood, for the Enterprise Wall Paper Co. Cost, $30,000.

BURNHAM, PA.—Steps have been taken by the members of the firm of Burnham, Williams & Co., of the Baldwin Locomotive Works, to recapitalize the collateral plant at Burnham, Pa., and known as the Standard Steel Works. It will have $3,000,000 capital, all being owned by Burnham, Williams & Co., and will issue $4,000,000 of first mortgage bonds. These will be taken by the firm.

BALTIMORE, MD.—The Maryland Glass Corporation, care of Emerson Drug Co., 308-312 West Lombard St., has awarded contract to McLAUGHLIN BROS., 100 East Lexington St., for construction of main factory, gas-producer building and powerhouse for glass-bottle plant to be located at Westport. The main building will be two stories high, 70 × 134 ft.; gas-producer building, two stories, 30 × 80 ft., and powerhouse, one story, brick interior, reinforced-concrete framework, steel-trussed roof, slag roofs. The mechanical equipment will include a gas-producer system for glass furnaces, steam-boiler plant, engines, electric generators, air compressors and modern glass-bottle machinery. McLaughlin Bros. will purchase all machinery and equipment necessary to complete buildings ready for operation.

WASHINGTON, D. C.—The Washington Market Co., E. R. Tinker, Pres., Pennsylvania Ave. and Seventh St., N. W., has awarded contract to YORK MFG. CO., York, Pa., for ice machinery to be installed in its new plant. Contracts for the building and other mechanical equipment have not been awarded as yet. D. I. Davis, Dearborn St., Chicago, Ill., is Engr.-in-Charge.

Swift & Co., 125 Monroe St., Chicago, Ill., have purchased nine lots bounded by L, M and First Sts., N. E. and Baltimore & Ohio R. R. tracks, and will erect cold storage plant and warehousees to cost about $300,000. D. E. Hartwell is Secy.

CAPE CHARLES, VA.—The Pocomoke Perfect Brick Co. has been incorporated with J. T. Daniel, Pres., J. R. Parsons Treas. and J. P. Butler Secy. The company will erect a 2-unit plant; cost of buildings and machinery, about $50,000; daily capacity, 40,000 sand-lime brick.

NORFOLK, VA.—R. M. Williams, 121 North Park Ave., Norfolk, Va., is interested in ink making machinery, including steam-jacket tanks or boilers. He desires to obtain prices and information regarding the above.

MARTINSBURG, W. VA.—The Hannis Distilling Co. will build a barrel plant, the buildings to be 150 × 45 ft. and 75 × 40 ft.; also a dry kiln, 125 × 40 ft.

GASTONIA, N. C.—The Dunn Mfg. Co. has received plans and specifications for erection of mill building, one story high, 78 × 200 ft., to contain 5,000 spindles for manufacturing cotton yarns. The contract for brick work has been awarded to J. E. McALLISTER. C. B. Armstrong is Pres.

NEWTON, N. C.—It is stated that the Ridgeview Cotton Mills has plans for 1-story building, 79½ × 164 ft., arranged with wood end for future enlargement. Contract for brick work has been awarded to H. S. MOSER, of Hickory, N. C., and for woodwork to SIGMON & DEALY, of Newton. About 2,500 spindles will be installed for manufacturing yarns. Electricity will be motive power. About $56,000 will be invested. H. F. Smith is Gen. Mgr.

FORT CASWELL (Southport post-office), N. C.—The contract for constructing and equipping ice and condensing plant, pump house, etc., Fort Caswell, N. C., has been awarded to A. J. ROBBINS, Southport, N. C., for the sum of $33,600.

DENTON, N. C.—The Denton Cotton Mills Co. proposes to erect a cotton mill here, operating 5,000 spindles. The company was lately incorporated with $100,000 capital by Berry Davidson, of Gibsonville, N. C., J. W. Neel, of Lexington, N. C., and J. A. Neel, of Roxboro, N. C.

BLACKBURG, S. C.—A company to erect and operate the Blackburg Mills has been incorporated with capital stock of $250,000 and will build mill for manufacturing fine sheetings. Incorporators, G. Lang Anderson of Williamston, S. C.; E. F. Pell of Blackburg, Andrew E. Moore of Gastonia, N. C.; J. C. Plonk of Cherokee Falls, S. C., and J. E. Sirrine of Greenville, S. C. Mr. Sirrine will be Engr. to plan, build and equip plant.

ELBERTON, GA.—It is stated that L. H. Turner & Co. will erect a flour and grist mill and cotton gin. The building is to be 100 × 225 ft.; cost of building and equipment, $20,000 to $40,000. Mill will be operated by water-power. L. H. Turner is Mgr.

SELINA, ALA.—The Louisville & Nashville R. R. Co. will erect a roundhouse, repair shops, water tanks, turn-table, etc., at Selina. W. H. Courtney is Ch. Engr., Louisville, Ky.

WINONA, MISS.—It is reported that the Winona Cotton Mills of Winona have decided to increase the present equipment and about $12,000 will be expended for new machines. There are 5,000 spindles and 200 looms now operating.

WINNFIELD, LA.—The Winnfield Hardwood Mfg. Co. will erect a plant to manufacture wagon and vehicle materials finished, all varieties of handles and laths and shingles; to operate in connection with sawmill to be built by Jan. 1. C. E. Freed is Pres. and Gen. Mgr.

MEMPHIS, TENN.—The SELDEN BRICK CONSTRUCTION CO., St. Louis, Mo., has the contract for erecting a 6-story warehouse plant for the Memphis Cold Storage Co., 99 South Front St., at a cost of $114,000. The building will be nine stories high, 63 × 235 ft. Alsup & Woods, Randolph Bldg., are Archs.; H. Moore is Gen Mgr.

YOUNGSTOWN, OHIO.—The Youngstown Furnace Co. will break ground soon for a foundry building, 80 × 200 ft. The building will be constructed of tile and structural steel and will be fireproof. Cost, $12,000. Bids will be received at once. Owsley & Boucherie, Wick Bank Bldg., Youngstown, are Archs.; Myron Wick is Pres.; A. K. Kimball, Gen. Mgr.

CINCINNATI, OHIO.—That part of the Louis Lipp Co.'s plant, Mitchell Ave. and the Baltimore & Ohio R. R., which was partially destroyed by fire recently, will be rebuilt as soon as matters can be adjusted with the insurance companies. The Louis Lipp Co. manufactures bath tubs and plumbers' supplies.

MARYSVILLE, OHIO.—Widmann & Walsh, Wainwright Bldg., St. Louis, are preparing plans for a 2 and 3-story dairy plant at Marysville, for the John Wilde Evaporated Milk Co. Cost, $150,000.

SALEM, OHIO.—A. Cameron, Salem, and Chapman & Chapman, Citizens' Bldg., Cleveland, are preparing plans for a 2-story factory building 300 × 160 ft., at Salem, for the American Case & Register Co. Bids will be received by R. M. Vick, Alliance, Ohio.

DAYTON, OHIO.—Bids are asked until noon, Dec. 19, for erecting a 4-story fireproof manual training high school in Dayton. The equipment to be installed will include machines, lathes, benches, etc., for manual training and domestic science, physical and chemical laboratories. Charles I. Williams, Callahan Bldg., is Arch. The building will cost $130,000; equipment, $40,000.

LOGANSPORT, IND.—A. R. Durkee, Arch., Manhattan Bldg., Chicago, it is reported, is preparing plans for additions which it is proposed making to the plant of the Routh Packing House Co. Plans are being prepared for a 2-story 116 × 114-ft. packing house building and a power-house, 30 × 56 ft. The buildings are to be of brick and reinforced concrete, with gravel roofs and calked floors and electric fixtures.

GARY, IND.—Frederick Lindquist, 90 Washington St., Chicago, Ill., will prepare plans for car building shops and power plant to be located just east of Gary, in Section 18, Lake County, Ind., for the Combined Liquid Tank & Freight Car Co., J. H. Bruce, Pres., 80 Dearborn St., Chicago. It will have two shops, each one story, 80 × 150 ft., another to be one story, 80 × 200 ft., one dry kiln, 1 story, 60 × 100 ft., and engine house and boiler house. All to be of brick with structural iron, concrete foundations, galvanized iron skylights, composition roofing, electric wiring and cement floors. Estimated cost, $25,000.

CHICAGO, ILL.—The RUDOLPH S. BLOME CO., Unity Bldg., has been awarded contract, at about $50,000, for the reinforced and other concrete work of the Ryerson & Sons' plant, at 16th and Rockwell Sts. Ritter & Mott, 204 Dearborn St., are Engrs.

Raeder & Wood, Engrs., 77 Jackson Boulevard, have made plans for a manufacturing plant for the National Lead Co., F. W. Rockwell, Jr., Supt., 1510 State St., on Johnson St., between 16th and 18th Sts. Plant will consist of a warehouse, one story, 75 × 140 ft.; power house, repair and machine shops, to be built of brick and reinforced concrete construction.

CHICAGO HEIGHTS, ILL.—Schneible Bros., 122 Monroe St., Chicago, has let general contract to GEORGE A. FULLER CO., 204 Dearborn St., for constructing a 4-story brick and stone brewing plant, to be built at Chicago Heights, Ill., for the Chicago Heights Brewing Co., Henry Padenius, Pres., at $115,000.

SUMMIT, ILL.—It is stated that George N. Chamberlain, Ch. Engr. for the Corn Products Refining Co., Heyworth Bldg., Chicago, Ill., is taking figures on the plant, which will be known as the Argo plant, to be built on the south side of 63d St., extending from Archer Ave. west to the drainage canal, Summit. It comprises 33 buildings, two 14-story refining buildings, each 150 × 200 ft.; two 8-story starch buildings, 135 × 250 and 150 × 150 ft.; three warehouse and manufacturing buildings, each 150 × 400 ft; three 2 and 3-story warehouses, 100 × 300 ft; ten or twelve 4-story manufacturing buildings, 100 × 150 ft., excepting one to be 300 ft. long, a storage building, with a capacity of 10,000 tons of gluten feed; grain storage tanks, with a capacity of 1,000,000 bushels; a power plant, with a capacity of about 12,000 HP., and generators of about 8,000 KW. will be installed. The large buildings will be of steel construction and the others of reinforced concrete and mill construction. The total cost is estimated at $5,000,000.

WAUKEGAN, ILL.—JAMES STEWART & CO., 1811 Fisher Bldg., Chicago, have the general contract for the erection of a grain elevator at Waukegan, for the Corn Products Refining Co., 42 East Madison St., Chicago. It will cover 258 × 50 ft., 182 ft. high, be of reinforced concrete construction, with 18 concrete tonks and will cost $150,000. George N. Chamberlain, office with the owners, is Ch. Engr.

FOND DU LAC, WIS.—The Gurney Refrigerator Co., C. J. Medbury, Pres., contemplates erecting a 3-story addition to its plant soon. Estimated cost, $30,000.

SUPERIOR, WIS.—The Webster Mfg. Co., manufacturers of chairs, will expend about $70,000 in rebuilding plant recently damaged by fire. Two new buildings will be erected, one 80 × 200 ft., the other 81 × 225 ft. The power plant was not damaged.

MARSHALL, TEX.—The Marshall Car Wheel & Foundry Co. will rebuild the plant burned at a loss of $100,000, and has awarded contract to J. C. BEESON and JAMES HIGGINS for erection of main buildings, 78 × 250 ft. and 56 × 280 ft. Several smaller buildings will be erected for warehouses and other purposes.

O'BRIEN, WASH.—G. H. Cunningham, 42 Eighth St., San Francisco, Cal., has formed a company and has obtained 20 acres of land near O'Brien upon which will be erected a $250,000 plant for the manufacture of waterproof fabrics. Construction work will begin at once.

PORTLAND, ORE.—The Brown-Yale Co., of Duluth, Minn., proposes to erect a 4-story laundry at East Tenth and Belmont Sts., to cost $80,000. F. J. Huebach is Mgr.

BARRIE, ONT.—The Fleming Aerial Ladder Co. has submitted a proposition to the town of Barrie, for the erection of a plant there to cost about $26,000.

MILLSIDE, B. C.—The Fraser River Sawmills, Millside, B. C., will install a complete new mechanical equipment in the engine room and will increase the capacity of the plant to 250,000 ft. of rough lumber a day. The cost will be about $100,000.

MISCELLANEOUS CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

FLATBOAT.—Cincinnati, Ohio.—Bids are asked until 2 p. m., Dec. 17, by Lieut.-Col. Wm. T. Rossell, Corps Engrs., U. S. A., for constructing one steel flatboat.

PIER.—Baltimore, Md.—The Baltimore & Ohio R. R. Co. has invited bids for reconstruction of its Locust Point pier. J. E. Griener is Asst. Ch. Engr., Baltimore.

WHARF REPAIRS.—Baltimore, Md.—Bids are asked until Dec. 9, by the Quartermaster, for repairs to the government wharf at Fort Howard, Md. (Baltimore post-office).

*DREDGE.—Portland, Ore.—Bids are asked until 11 a. m., Dec. 23, by Lieut.-Col. S. W. Roessler, Corps. Engrs., U. S. A., for constructing one wooden hull hydraulic dredge.

WHARF.—San Francisco, Cal.—Bids are asked by the Board of Harbor Commissioners until 2 p. m., Nov. 29, for constructing a wharf along Illinois St., between 17th and 18th Sts.

STEAMBOAT.—Portland, Ore.—Bids are asked by Lieut.-Col. S. W. Roessler, Corps Engrs., U. S. A., Portland, until 11 a. m., Dec. 20, for construction of one stern-wheel steamboat.

LEVEE.—Fresno, Cal.—Bids are asked until Dec. 2 by Board of Supervisors of Fresno County for the construction of a levee for an approach to the south end of Skaggs Crossing bridge.

BULKHEAD.—Montgomery, Ala.—Bids are asked until Dec. 11th, by Capt. H. B. Ferguson, Corps Engrs., U. S. A., Montgomery, for constructing bulkhead at mouth of Apalachicola River, Fla.

WHARF.—Newport, R. I.—The work of completing and repairing Quartermaster's Wharf and ferry slip at Fort Greble, R. I., has been awarded to J. C. TERRY, 564 Durfee St., Fall River, Mass., at $3,950.

BOAT REPAIRS.—Fort Totten, N. Y.—Bids are asked by First Lieut. H. U. Tompkins, C. A. C., until noon, Nov. 29, for repairs and alterations on U. S. torpedo planter Gen. Henry J. Hunt, as per specification.

BULKHEAD.—Southport, N. C.—Plans, specifications, etc., for building creosoted bulkhead at Fort Caswell, N. C., are on file at office of Engineering News, New York. Bids are asked until Nov. 30. (Noted on Nov. 14.)

DOCK.—Buffalo, N. Y.—Bids were received as follows for constructing dock and berth for fire-boat in Clark & Skinner canal at Buffalo River: Geo. Parks & Sons, $3,396; A. F. Chapman & Co., $3,500; Roberts & Co. $4,392 (informal).

CROSSHEADS, LAMP-POSTS.—New York, N. Y.—Bids are asked by John H. O'Brien, Comr. Water Supply, Gas and Electricity, until 2 p. m., Dec. 6, for furnishing and delivering special crossheads for lamp-posts in Boro. of Brooklyn.

BRICK.—New York, N. Y.—Bids are asked until noon, Dec. 5, by Foster Crowell, Comr. Street Cleaning, for furnishing and delivering 10,000 North River bricks (red), 8,000 square fire bricks, 5,000 end wedge fire bricks, 50 barrels fire clay, 30 cubic yards Cow Bay sand.

*DREDGING.—Mobile, Ala.—Bids were received on Nov. 21 by Maj. H. Jervey, Corps Engrs., U. S. A., for dredging at the mouths of Wolf and Jordan Rivers, Miss. Contract was awarded to the SOUTHERN DREDGING CO., at 16 cts. a cu. yd. Estimated cost, $30,000.

DREDGING.—Boston, Mass.—Bids are asked by the Bureau Yards and Docks, Navy Dept., Washington, D. C., until 11 a. m., Dec. 14, for dredging in slip at Boston Navy Yard. R. C. Holliday, Ch. of Bureau. Specifications are on file at office of Engineering News, New York.

LEVEE.—Chico, Cal.—The Durham Levee Association has awarded the contract for the construction of a levee, 2¾ miles long, to JACOB NEILSON, of Chico, at $5,000. It will extend on the northwest side of Butte Creek from the Compton Place to the Butte Creek bridge east of Durham.

TUNNEL.—Madison, Wis.—Bids are asked until noon, Dec. 18th, by Lew F. Porter, Secy., Wisconsin Capitol Commission, for building the concrete tunnel between heating and power plant and capitol now building at Madison, Wis.; also a proposition for the wrecking of the east wing of the present capitol.

LEVEE CONSTRUCTION.—New Orleans, La.—Bids are asked by the Mississippi River Commission, Fourth District, 1539 Louisiana Ave., New Orleans, until Dec. 16 for constructing 771,600 cu. yds. of levee work in Lower Tensas, Atchafalaya and Ponchartrain levee districts. Maj. J. F. McIndoe, Corps Engrs., U. S. A.

*MONUMENT.—New Orleans, La.—Bids were received on Nov. 14 by Maj. J. F. McIndoe, Corps Engrs., U. S. A., for completion of monument to memory of American soldiers who fell in the battle of New Orleans at Chalmette, La. The bid of M. P. Doullut, 421 Egania St., New Orleans, at $20,556, was recommended for acceptance.

RETAINING WALL.—Austin, Tex.—The City Council will advertise for new bids for construction of retaining wall at foot of Congress St., former contract having been invalidated. Wall will be 40 ft. high, 9 ft. thick at base and 3 ft. thick at top. Appropriation of $9,000 has been made. C. E. Leonard, City Engineer, has prepared plans and specifications.

*DREDGING.—Newport, R. I.—Bids were received on Nov. 22, by Lieut.-Col. J. H. Willard, Corps Engrs., U. S. A., for dredging in Newport Harbor, as follows: (Approximate amount to be expended under this contract, $171,000): John P. Randerson, Albany, N. Y., 40 cts per cu. yd.; W. H. Beard Dredging Co., New York City, 29 cts.; The International Contracting Co., New York City, 22 cts.; Charles M. Cole & J. S. Packard Dredging Co., Fall River, Mass., and Providence, R. I. 22 8-9 cts.

DITCH.—Madison, Minn.—Bids were received on Nov. 18 by A. G. Shogren, Audr., Lac qui Parle County, at Madison, for constructing judicial ditch No. 1 in Lac qui Parle and Yellow Medicine Counties. Contract for branches of ditch was let to R. E. HUBBARD, for $1,850. All bids for balance of the work were rejected, and new bids are asked until 4.30 p. m., Dec. 18. Estimated quantity of dredge, plow and bridge work, 141,870 cu. yds. Estimated cost, $23,647. Berner Loftfield, Madison, is Engr.

*DREDGING.—New York, N. Y.—Bids were received as follows by Col. John G. D. Knight, Corps. Engrs., U. S. A., Army Bldg., New York, on Nov. 25, for dredging in Mattituck Harbor, N. Y.: (A) scow meas.; (B) prism meas.: J. P. Randerson, New York, (A), 35 cts.; (B), 35 cts. Atlantic Dredging Co., New York, (A), 43.3 cts.; (B), 43.3 cts. J. Marvin Briggs, New York, (A), 28.4 cts.; (B), 34.8 cts. J. S. Packard, Providence, R. I., (A), 49 cts.; (B), 49 cts. Maritime Dredging Co., 78 Broad St., New York, (A), 23⅔ cts.; (B), 23⅔ cts.

*DREDGING.—Grand Rapids, Mich.—Bids were received as follows on Nov. 20, by Col. M. B. Adams, Corps Engrs., U. S. A., for dredging at Muskegon Harbor, Mich.: (A) 193,750 cu. yds. dredging, per cu. yd.; (B) approximate total: Grelling Bros., Green Bay, Wis., (A) 17.75 cts.; (B) $34,391. Samuel O. Dixon, Milwaukee, Wis., (A) 22.9 cts.; (B) $44,369. Great Lakes Dredge & Dock Co., Chicago, Ill., (A) 26⅝ cts.; (B) $51,586. Graves & Stephens, Cleveland, Ohio, (A) 29.5 cts.; (B) $57,156. The Fitzsimons & Connell Co., Chicago, Ill., (A) 39 cts.; (B) $75,562.

*EXCAVATION.—Detroit, Mich.—Bids were received as follows on Nov. 20 by Col. Charles E. L. B. Davis, Corps Engrs., U. S. A., for rock and earth excavation at Section 3, Plan B, Detroit River: (A) 1,465,000 cu. yds. earth, full rate; (B) 145,000 cu. yds. earth, half rate; (C) 560,000 cu. yds. rock, full rate; (D) 260,000 cu. yds. rock, half rate; (E) total. P. B. McNaughton & O. E. Dunbar, Buffalo, N. Y., (A) 50 cts.; (B) 25 cts.; (C) $2.80; (D) $1.40; (E) $2,700,750. Great Lakes Dredge & Dock Co., Chicago, Ill., (A) 58 cts.; (B) 29 cts.; (C) $3.22; (D) $1.61; (E) $3,113,550.

*BREAKWATERS.—Grand Rapids, Mich.—Bids were received as follows, on Nov. 20, by Col. M. B. Adams, Corps Engrs., U. S. A., for construction of timber breakwaters at Ludington, Mich.: (No bids were received for construction of stone breakwaters.) L. E. Schnorbach & Co., Muskegon, Mich., $621,663; Great Lakes Dredge & Dock Co., Chicago, $652,059; Burk, Smith & Nelson, Muskegon, $652,089; Grelling Bros., Green Bay, Wis., $688,109; Patrick Kechane, Fayetteville, N. Y., $703,046; Wm. H. Gillen, Milwaukee, Wis., $735,946. Itemized prices are given under Contract Prices in this issue.

TUNNEL.—Los Angeles, Cal.—Bids are asked by the Board of Public Works until 11 a. m., Dec. 2, for machinery, apparatus and material for use in the construction of the Elizabeth Lake tunnel. Fo[illegible] of proposal, contract and bonds a[illegible] opies of specifications and detailed drawi[illegible] will be furnished to prospective bidders [illegible] application to Bureau of Los Angele[illegible] 1400 Union Trust Bldg., Los An[illegible] quedut. Delivery of machinery, etc., must be [illegible] b. cars at works and state early date [illegible] omplete delivery. Horace B. Ferris, S[illegible] (Bids were asked for this work until [illegible] 15th, as noted on Nov. 14th.)

SEAWALL, ETC.—Newport, [illegible] —Bids were received as follows on N[illegible] 22, by Capt. Willis C. Metcalf, Q. M., [illegible] S. A., for construction of coal bins, s[illegible] and railway at the power house at F[illegible] Adams, R. I.: (A) coal bin; (B) seawall [illegible] railway; (D) walk: Kocher & S[illegible] (A) $2,500; (D) $175. M. A. McCo[illegible] (A) $2,237; (B) $3,930; (C) $1,170; [illegible] $90. John F. Gill Co., (A) $3,000; (B [illegible] $1,930; (C) $750; (D) $90 (all or none). [illegible] T. White, (D) $75. Darling & Slade (A [illegible] $2,040; (B) $1,950; (C) $829; (D) $80. R[illegible] mendation has been made to the Qua[illegible] master General that the bid of Darling & [illegible] Co. 56 North Main St., Fall River, Mas[illegible] be accepted for the whole job.

U. S. POSSESSIONS AND CUBA.

(denotes that this work is advertised in Engineering News.)*

RAILROAD.—Hawaii.—The Hawa[illegible] Development Co., of Honolulu, [illegible] rating largely in the development of Kona District, on the Island of Hawaii, will build [illegible] miles of railroad in that district.

ROADS.—Cuba.—W. J. OLIVER, [illegible] Chattanooga, Tenn., has been awarded contract for construction of government pi[illegible] roads. Estimated value is between $3,000,000 and $8,000,000. Total cost of the roads [illegible] about $18,000,000.

STEEL BARGES.—Panama.—Th[illegible] Gen. Purchasing Officer, Isthmian Canal Commission, has awarded to the NEWPORT NEWS SHIPBUILDING & DRY DOCK CO., Newport News, Va., contract for twelve steel barges at $282,000.

FOREIGN CONTRACTS.

(denotes that this work is advertised in Engineering News.)*

DRAINAGE.—Spain.—Bids are asked by the "Ministerio de Fomento," Madrid, until Dec. 8, for drainage works in the Port of Alicante. Estimated cost, 654,473 pesetas (about $127,500). Local representation is necessary.

GAS WORKS.—Netherlands.—The "College des bourgmestres et echevins de Leeuwarden" is interested in a project for the enlargement of the existing gas works to the "Consell Communal," at Leeuwarden. Estimated cost, 313,000 florins (about $125,000).

HARBOR, RAILWAYS.—Roumania.—The Roumanian Government, Bucharest, has appropriated 7,000,000 lei (about $1,350,000) for constructing extension to harbor at Constantza; and also for the construction of additional railways and petroleum reservoirs. Wm. G. Boxshall is the American Vice-Consul-General at Bucharest.

*TUNNEL.—New Zealand.—We are officially advised that contract for construction of a tunnel about five miles 25 chains in length at Arthur's Pass, through the dividing range between Canterbury and Westland, on the route of the New Zealand Midland Ry., has been awarded to JOHN McLEAN & SON, of Wellington, N. Z., at £599,794 (about $2,915,000). The work is to be completed in five years. Bids were received on March 18. P. S. Hay is Engr.-in-Chief, Public Works Office, Wellington, N. Z. (Advertised in Engineering News from Sept. 13, 1906, to March 14, 1907.)

RAILWAY BED-PLATES.—Norway.—Bids are asked until 3 p. m., Nov. 29, for the supply of 387,900 railway bed-plates. Bids are to be marked "Anbud paa Underlagsplader," and are to be sent to Styrelsens for Statsbanernes Expeditionskontor Christiania. Apart from the usual Customs duties a preference of from 10 to 15 per cent. is given to Norwegian manufacturers. In all cases of Norwegian Government contracts, it is obligatory that a resident agent should act for bidders not residing in Norway, and be responsible to the Government, but it is not necessary for the agent to be a Norwegian firm.

HARBOR IMPROVEMENTS.—Spain.—Bids are asked by the "Ministerio de Fomento," Madrid, until Dec. 5, for building the third and last section of the harbor of Cambados, in the province of Pontevedra, at the estimated cost of 334,957 pesetas (about $64,645). A deposit of 3,349 pesetas (about $646) is required to qualify any bid. Local representation is necessary.

Bids are asked until Dec. 9 by the "Ministerio de Fomento," Madrid, for building of port works at Luanco, in the province of Oviedo, at the estimated cost of 602,129 pesetas (about $116,000). Local representation is necessary.

POWER DEVELOPMENT.—Norway.—A plan is under way to construct a power station in the Kinso Basin, in Hardanger, and a factory, probably for the production of chemical manure, at Kinservik, on the Hardanger-Fjord. It is proposed to dam up a chain of lakes and carry the water through a rock tunnel, about 2½ miles long, with a 400-meter fall, to an upper surge house, whence it is to be conducted through a similar tunnel to a lower power station. The power is then to be transmitted down the Huse Valley to the factory near the sea at Kinservik. It is planned to develop over 100,000 HP. Thorvald K. Beyer is American Vice-Consul at Bergen.

TELEPHONE MATERIAL.—Australia.—Bids are asked on the following rates for supplying telephone material: For [illegible] supply and delivery at Melbourne of five sections of a telephone switchboard for incoming junction lines, for the Central telephone exchange, Victoria. Bids are asked by Dep-

ty Postmaster-General, Melbourne, until Dec. 17.

For the supply and delivery at the Post and Telegraph Stores, Brisbane, of insulators, iron spindles, and soft drawn copper wire. These are asked by the Deputy Postmaster-General, Brisbane, until Dec. 16.

For the supply and delivery at the Department Stores, Port Adelaide, of a common battery switchboard, 400 subscribers' telephones and 400 protectors. Bids are asked by the Deputy Postmaster-General, Adelaide, until March 11, 1908. Bidding forms, etc., may be obtained at the Australian Commonwealth Offices in London, 72 Victoria St., S. W., where also preliminary deposits bids may be paid.

STEEL.—Germany.—Bids are asked for supplying steel material to the Prussian State Railway Directorates, at Berling, Stettin, Konigsberg (Prussia), Halle-on-Salle, Magdeburg, Bromberg and Dantzig, as follows: 48,800 kilos of spring steel (ingot steel) in seven lots; 20,000 kilos of spring steel (crucible steel) in one lot, and 21,700 kilos of ingot steel for axle guards in six lots. Sealed bids, inscribed "Angebot auf Federstahl pp." must be delivered to the "Rechnungsbureau, 1-4 Schoeneberger Ufer, Berlin, W. 35," not later than 11 a. m., Dec. 4. Bids will be opened on Dec. 22. Delivery of the various articles is to be made at the different works (Werkstaetten) specified in the bid during the period from April 1, 1908, until Mar. 31, 1909, but the authorities may demand such deliveries to be made before the former date and after the latter, not, however, subsequent to July 30, 1909. Bidders must state where and by whom the material has been produced. Forms of bid and contract may be obtained at the "Zentralbureau, Zimmer 420," 1-4 Schoeneberger Ufer, Berlin, W. 35, on payment of 15 cts. each (by Post-Office order or money order, but not in stamps).

SUBWAY.—Argentina.—We are advised by the Consul-General, 80 Wall St., New York, that bids are asked until May, 1908, for construction of proposed system of municipal underground railways in Buenos Aires, the general capital of Argentina. The first bids to be called for will embrace the construction of tunnels, stations and roadbed complete of two doube-track lines. The lines to be constructed under these bids will connect (a) Plaza de Mayo, to Plaza Once de Setiembre, via Avenide de Mayo, Callao and Rivadavia, connecting with the Western Railway and the Port Railways, length, about four kilometers; and (b) Retiro and Plaza Constitucion via Juncal Cerrite and Lima, approximately 4.5 kilometers. The roadbed is to be laid on quebracho ties and will have 100-lb. rails. The contractor must transport all dirt removed from tunnel excavations to Flores for the use of the municipality. Nearly all the soil to be encountered in building tunnels and stations will be of a compact, reddish clay, that will maintain its shape and position in tunnels, excepting at the connection with the Port Railways where the land is filled in. The line connecting Plaza Once de Setiembre and Plaza de Mayo will cross above the line connecting Plaza Constitucion and the Retiro at Lima and Avenide de Mayo. A station will be built for each line at this point where four elevators will be installed. Lines connecting with the Port Railways and steam railway stations will be built in cuts and in the former case will pass over the large water ducts between the city and the Port. The gage will be 5 ft. 6 ins. and each tunnel will have double tracks, except at the stations, or in special cases, where it may be found convenient to have more than two tracks, or to construct tunnels for one track only. On each line there will be seven stations of general type and six special ones, the latter being that at Plazas Constitucion, Mayo and Once de Setiembre, Avenida Callao, Retiro and at the crossing of the two lines at Avenida de Mayo and Lima. The length of the platforms are to be not less than 84 yds. The road shall be provided with the most modern system of automatic signals. Work is to be commenced simultaneously at the principal stations named above excepting the section between Avenida de Mayo and Retiro. It is estimated that the cost including all construction and the cost of the powerhouse will average $1,146,150, complete and ready for service.

After the two principal routes have been constructed it is proposed to build an underground line to Belgrano, Villa Ortuzar, Flores, Barracas, and through various streets of the city.

Plans are on file at the office of the Argentine Consul-General, 80 Wall St., New York, and at the Argentine Legation, Washington, D. C.

CONTRACT PRICES.

AQUEDUCT.—Durhamville, N. Y.—The bids received by F. C. Stevens, Supt. Public Works, on Nov. 26, for the work of constructing a new aqueduct for the Erie Canal, near Durhamville, N. Y., were—(a) Theodore F. Kalbfleisch, Glens Falls, N. Y., $56,093; (b) N. D. Peters, Utica, N. Y., $60,532; (c) The Foundation Co., 115 Broadway, New York, $63,316; (d) Casey & Murray, Rochester, N. Y., $60,389; (e) Marcellus & Ballard, Oneida, N. Y., $69,530; Engineer's estimate, $46,[illegible]. The itemized prices were:

	(a)	(b)	(c)	(d)	(e)
Bailing and draining	$4,000.00	$2,500.00	$3,028.00	$3,500.00	$8,000.00
Removal of spillway, waste-gates, etc.	220.00	200.00	325.00	200.00	500.00
12,000 cu. yds. excavation	.85	1.00	1.10	.80	1.00
1,000 cu. yds. 2d-class reinforced concrete	11.75	12.00	12.12	13.60	13.00
1,000 cu. yds. 3d-class reinforced concrete	9.70	9.00	10.60	10.00	12.00
[illegible] sq. yds. stone paving	1.35	1.50	2.00	2.00	2.00
[illegible] sq. yds. stone paving, relaid	.60	.75	2.00	1.50	1.00
[illegible] cu. yds. lining	2.00	1.50	2.00	1.50	1.00
[illegible] cu. yds. puddle	1.80	1.75	1.05	2.00	2.00
[illegible] cu. yds. riprap	.60	1.00	1.25	3.00	3.00
8,000 lin. ft. foundation piles	.30	.60	.30	.45	.35
[illegible] m. ft. B. M. wooden sheet piling	46.00	80.00	92.00	60.00	60.00
120,000 lbs. metal reinforcement	.04	.04	.04	.04	.04
11,000 lbs. metal in waste gates	.12	.10	.14	.06	.18
[illegible] lin. ft. wrought-iron pipe railing	1.45	1.25	1.25	1.50	2.00
Totals	$56,093	$60,532	$63,316	$60,389	$69,530

*BREAKWATERS.—Grand Rapids, Mich.—Bids were received as follows Nov. 20 by Col. M. B. Adams, Corps Engrs., U. S. A., for construction of breakwaters at Ludington, Mich. The bidders were: (A) L. E. Schnorbach & Co., Muskegon, Mich.; (B) Great Lakes Dredge & Dock Co., Chicago, Ill.; (C) Burk, Smith & Nelson, Muskegon, Mich.; (D) Grelling Bros., Green Bay, Wis.; (E) Patrick Kechane, Fayetteville, N. Y.; (F) William H. Gillen, Milwaukee, Wis. The itemized prices were as follows: For 3,000 cu. yds. dredging for crib foundations: (A) 50 cts.; (B) 60 cts.; (C) 90 cts.; (D) 60 cts.; (E) 97 cts.; (F) 90 cts. For 61,908 lin. ft. foundation piles: (A) 75 cts.; (B) 65 cts.; (C) 70 cts.; (D) 75 cts.; (E) 70 cts.; (F) 90 cts. For 1,224 lin. ft. oak guard piles: (A) 40 cts.; (B) 45 cts.; (C) 50 cts.; (D) 50 cts.; (E) 70 cts.; (F) 90 cts. For 167,232 ft. b. m., per M ft. b. m. oak timber: (A) $60; (B) $60; (C) $65; (D) $65; (E) $53; (F) $80. For 2,094,032 ft. b. m., per M ft. b. m. white, Norway or southern pine or Douglas fir timber: (A) $45; (B) $44; (C) $46; (D) $50; (E) $55; (F) $50. For 5,738,392 ft. b. m., per M ft. b. m. hemlock timber: (A) $30.20; (B) $35; (C) $35; (D) $39; (E) $38; (F) $40. For 545,760 ft. b. m., per M ft. b. m. white, Norway or southern pine or Douglas fir planks for decking: (A) $45; (B) $41.50; (C) $42; (D) $50; (E) $55; (F) $50. For 887,727 lbs. drift bolts: (A) 4 cts.; (B) 4½ cts.; (C) 4 cts.; (D) 6 cts.; (E) 4 cts.; (F) 5 cts. For 259,841 lbs. screw bolts: (A) 4 cts.; (B) 4¾ cts.; (C) 5 cts.; (D) 6 cts.; (E) 4 cts.; (F) 5 cts. For 49,536 lbs. spikes: (A) 5 cts.; (B) 4¼ cts.; (C) 5 cts.; (D) 6 cts.; (E) 4 cts.; (F) 5 cts. For 118,132 tons stone 50 to 100 lbs. each: (A) $1.59; (B) $1.65; (C) $1.60; (D) $1.40; (E) $1.69; (F) $1.70. For 18,153 tons stone 500 lbs. or more each: (A) $1.89; (B) $1.90; (C) $1.90; (D) $1.95; (E) $2; (F) $2.25. Approximate total: (A) $621,063; (B) $652,059; (C) $632,089; (D) $688,100; (E) $703,046; (F) $735,946.

CIVIL SERVICE EXAMINATIONS.

AXEMAN.—New York, N. Y.—An examination will be held on Jan. 7, at 10 a. m., by the Municipal Civil Service Commission, 299 Broadway, for the position of axeman. Applications will be received until 4 p. m., Dec. 11. Age limit, 18 years; salary, $720 to $900 a year. Frank A. Spencer is Secy.

INSPECTOR.—Albany, N. Y.—The State Civil Service Commission will hold examinations Dec. 14, 1907, for the following positions: Director's Assistant, State Library, $2,100; Inspector, State Board of Pharmacy, $780 to $1,200. The last day for filing applications for these positions is Dec. 7. Full information with application forms for any of these examinations may be obtained upon postal card request from Charles S. Fowler, Ch. Examiner of the Commission at Albany.

ARCHITECTURAL DRAFTSMAN.—Philippines.—The U. S. Civil Service Commission announces an examination on Jan. 8 and 9, to secure eligibles from which to make certification to fill a vacancy in the position of architectural draftsman in the Philippine Service at Manila, at $1,400 or $1,600 per year, and vacancies requiring similar qualifications as they may occur in the Philippine Service. Men only will be admitted to this examination. It is desired that only persons who are graduates of technical schools should apply for this examination. Competitors will be furnished with all the necessary drawing paper, but must bring drawing board about 18 ins. square and all other drawing materials and instruments. Age limit, 18 years or over. Application forms 2 and 375. Applications must be filed with the Commission at Washington before Dec. 28.

MARINE FIREMAN.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on Dec. 23 to secure eligibles from which to make certification to fill the following-named vacancies in the Quartermaster's Department-at-Large, and vacancies requiring similar qualifications as they may occur in any branch of the service: One vacancy, $900 a year, San Francisco, Cal., steamer Lieut. George M. Harris. Two vacancies, $540 a year and rations each, Fort Trumbull, Conn., steamer General Greene. Two vacancies, $480 and rations each, Fort Barrancas, Fla., steamer Poe. Two vacancies, $540 and rations each, Fort Dade, Fla., steamer General Timothy Pickering. One vacancy, $540 and rations, Fort Morgan, Ala., steamer Batchelder. Two vacancies, $540 and rations each, Fort H. G. Wright, N. Y., steamer Capt. Chas. W. Rowell. Two vacancies, $780 each, Fort Worden, Wash., steamer Major Evan J. Thomas.

Also the following vacancies for fireman: Two vacancies, $660 each, Fort Hamilton, N. Y., steamer Capt. Wetherill. $660, Fort Banks, Mass., steamer Capt. T. W. Morrison. $780, Fort Stevens, Ore., steamer Major Guy Howard. $780, New York, N. Y., steamer Cyrus W. Field. $900, San Francisco, Cal., steamer McDowell. $600, Fort Howard, Md., steamer Capt. John C. Gray. Attention is invited to the fact that applications for the position of marine fireman may be filed at any time, but only those filed prior to Dec. 23, with the U. S. Civil Service Commission, Washington, D. C., in complete form, will be considered for the specific vacancies mentioned. As the Commission has experienced considerable difficulty in securing a sufficient number of eligibles for this position to meet the needs of the service, an examination having been held on July 10 and Aug. 22, 1907, qualified persons are urged to enter this examination. No educational test will be given, and it will not be necessary for applicants to appear at any place for examination. Application Form 1093. Age limit, 20 years.

ENGINEERINGMATERIAL PRICES.

TRACK FASTENINGS—
Pittsburg, f. o. b. cars—Angle bars, 1.65 to 1.75 cts.; spikes, 2.10 to 2.15 cts.; bolts, square nuts, 2.65 to 2.75 cts.; bolts, hexagonal nuts, 2.80 to 2.90 cts.

RAILS, STEEL—
New York—at mill—New standard sections, $28; standard, second quality, $27 to $28; light sections, 12 to 14 lbs., $34 to $36; old iron rails, f. o. b. New York, $20 to $21; old steel rails, short lengths, $14 to $14.50; old steel rails, re-rolling lengths, $13.50 to $14.
Pittsburg—Standard sections, at mill, $28; standard, second quality, $27.50 to $28; light rails, 25 to 45-lb., $30; 20-lb., $31; 16-lb., $32; 12-lb., $34; 10-lb., $36, and 8-lb., $40.

STRUCTURAL MATERIALS—
New York—at tidewater—Beams and channels, up to 15-in., 1.86 cts.; over 15-in., 1.86 cts.; angles 3 × 2 and up to 6 × 6, 1.86 cts.; zees, 3-in. and larger, 1.90 cts.; tees, 3-in. and larger, 1.91 cts.; steel bars, half extras, 1.76 cts.
Pittsburg—Beams and channels, up to 15-in., 1.70 cts.; over 15-in., 1.80 cts.; angles, 3 × 2 × ¼-in. thick, up to 6 × 6-in., 1.70 cts.; 8 × 8 and 7 × 3½-in., 1.80 cts.; zees, 3-in. and larger, 1.70 cts.; tees, 3-in and larger, 1.75 cts.; bulb angles and deck beams, 2 cts. Under the steel bar card, angles, channels and tees under 3-in. are 1.70 cts., base, for Bessemer and open hearth, subject to half extras on the standard steel bar card.

PLATES AND SHEETS—
New York—at tidewater—The following prices are based on carload lots, with 5 cts. extra for less than carload lots. Terms, net cash in 30 days:

Tank plates, 6¼ to 14 ins. wide	$1.86 to $1.96
14½ to 100 ins. wide	1.96 to 2.00
Flange and boiler test	1.96 to 2.06
Marine	2.26 to 2.36
Locomotive, fire-box	2.75 to 3.50
Still bottoms	2.14 to 2.29½

Note—Plates more than 100 ins. in width, 5 cts. extra per 100 lbs.; plates 3-16-in. in thickness, $2 extra; Nos. 7 and 8 gage, $3 extra; No. 9, $5 extra.
Pittsburg—Tank, ¼-in. thick and heavier, 1.70 to 1.80 cts.; black sheets, 27-gage, 2.50 to 2.55 cts.; black sheets, 28-gage, 2.60 to 2.65 cts.

IRON—
Pig Iron:
At New York—tidewater—

Northern—	
No. 1 X foundry	$20.00 to $22.50
No. 2 X foundry	19.50 to 22.00
No. 2 plain	19.00 to 21.50
Gray forge	18.50 to 21.00
Basis	19.00 to 20.50
Virginia—	
No. 1 foundry	24.25 to 24.75
No. 2 foundry	24.00 to 24.25
Basic	21.00 to 22.00
Southern—	
No. 1 foundry	22.00 to 24.75
No. 2 foundry	21.50 to 24.25
No. 3 foundry	21.00 to 23.75
No. 4 foundry	20.50 to 23.25
No. 1 soft	20.00 to 22.75
No. 2 soft	19.50 to 22.25
Gray forge	19.00 to 21.75
Mottled	18.50 to 21.25
At Pittsburg, f. o. b. cars—	
No. 2 foundry	22.50 to 23.00
Gray forge	21.50 to 22.00
Bessemer iron	22.00 to 22.50
Ferromanganese	56.00 to 60.00
At Chicago—	
Lake Superior Charcoal	26.00 to 26.50
Northern Coke Foundry, No. 1	22.00 to 22.50
Northern Coke Foundry, No. 2	21.50 to 22.00
Northern Coke Foundry, No. 3	21.00 to 21.50
Northern Scotch No. 1	22.50 to 23.00
Ohio Strong Softeners, No. 1	22.50 to 23.00
Ohio Strong Softeners, No. 2	22.00 to 22.50
Southern Coke, No. 1	21.85 to 22.35
Southern Coke No. 2	21.35 to 21.85
Southern Coke, No. 3	20.85 to 21.35
Southern Coke, No. 4	20.35 to 20.85
Southern Coke, No. 1 Soft	21.85 to 22.35
Southern Coke, No. 2, Soft	21.35 to 21.85
Southern Gray Forge	19.35 to 19.85
Southern Mottled	20.35 to 20.85
Malleable Bessemer	22.00 to 22.50
Standard Bessemer	23.90 to 24.40
Jackson Co. and Kentucky Silvery, 6%	30.40 to 30.90
Jackson Co. and Kentucky Silvery, 8%	32.40 to 32.90
Jackson Co. and Kentucky Silvery, 10%	34.40 to 34.90

Cast-iron Pipe:
New York—Carload lots, net tons, 6-in., at tidewater, $32.50 to $33.
Chicago—4-in. water pipe, $37 to $38; 6-in. to 12-in., $36 to $37; over 12-in. $35 to $36, with $1 extra for gas pipe.

MISCELLANEOUS MATERIALS—
Asphaltum:
Ventura and other California asphalts, $20 to $23 per ton at New York; Trinidad refined, $22 to $25 per ton; Venezuela asphalt, $25 to $30 per ton; Bermuda asphalt, $25 to $35.
Cement:
Rosendale or Natural, in wood, 95 cts. per bbl.; Portland domestic, in sacks, $1.20 to $1.30; in wood, $1.50 to $1.60; German Portland, $1.90 to $2.10.
Copper:
Lake, 14½ cts.; electrolytic, 14 to 14¼ cts.; casting, 13¾ to 14 cts.
Lead:
New York, spot, 4.55 to 4.65 cts.
Spelter:
New York, spot, 5.40 to 5.45 cts.
Tin:
New York, spot, 31½ to 32 cts.
Tar:
New York, $5.85 to $6 per bbl.
Pitch:
New York, $3.20 per bbl.

LUMBER—
New York, wholesale prices:
Piling—Spruce, ordinary cargoes, 6 to 7 cts.; oak, 14-in. butt, 40 to 50 ft., 19 cts.; 50 to 55 ft., 22 cts.; 55 to 60 ft., 23 cts.; 60 ft. and up, 25 cts.; pine, 60 to 65 ft., $8.50; 65 to 70 ft., $9.50; 70 to 75 ft., $10.50; 80 ft. and up, $16.
Railroad ties—Yellow pine, 6 × 9 ins. × 8 ft., 67 to 69 cts.; 6 × 8 ins. × 8 ft., 62 to 64 cts.; 7 × 9 ins. × 8 ft., 75 to 77 cts.; 7 × 8 ins. × 8½ ft., 74 to 75 cts., 7 × 9 ins. × 8½ ft., 79 to 80 cts.

INDUSTRIAL NOTES.

THE WYCKOFF PIPE & CREOSOTING CO., Stamford, Conn., announces that the New York & New Jersey Telephone Co. is installing creosoted conduits furnished by the Wyckoff company, for underground wire protection in Brooklyn, N. Y., Long Branch, N. J., and Allenhurst, N. J.

THE EXPANDED METAL & CORRUGATED BAR CO., of St. Louis, Mo., states that its product, the Johnson corrugated bar, has been awarded the gold medal by the Jury of Awards of the Jamestown Exposition. This is the fourth gold medal that the corrugated bar has been awarded, the last one having been given at the International Exhibition at New Zealand.

J. G. WHITE & CO., New York, shipped Philippine railway equipment to the value of one-quarter million dollars on the S. S. "Croydon," which recently sailed from New York for Manilla. The consignment included locomotives, rolling stock, and construction plant of nearly every description. The material goes to the Islands of Cebu and Panay, upon which the construction of the lines of the Philippine Railway Co. is now well advanced.

THE INCREASING USE OF VOLTAX PAINT, manufactured by The Electric Cable Co., New York, for protecting the hulls of vessels against the corrosive action of seawater and the adhesion of barnacles, is emphasized by some applications of it which are about to be made by the government. These will include the painting of the "General Joseph E. Johnston" of the Quartermaster's Department of the Army, the steamer "Rowell" of the same department, the transport "Kilpatrick" now undergoing repairs at Newport News for the Philippine service, and the U. S. S. S. "Vestal."

THE SIMPLEX CONCRETE PILE CO., Philadelphia, Pa., reports that, among recent installations, Simplex concrete piles have been used for the foundations of the Fruit Auction Exchange Building, corner Franklin and Washington Sts., New York City; the foundations for the Isaac G. Johnson Steel Castings Foundry, on Spuyten Duyvil Creek, New York City; the refuse destructor for the Borough of Richmond, City of New York; the foundations for the addition to the plant of the Standard Oil Co. at Claremont Ave., Jersey City. The Foundation Company, 115 Broadway, New York City, has been awarded the contract for borings and for placing Simplex concrete piles in the foundations for a new refining plant for the S. T. Baker Oil Co., of New York City, at Elizabeth, N. J. These piles are to be used in the foundations of the tanks, the walls of the filling house, storage house and tank house.

THE BALL & WOOD CO., Elizabethport, N. J., begs to announce to its customers and to all users of compressed air, the addition to its well-known engine business of a line of high-grade air compressors of new and advanced type, designed to meet the modern requirements for air compressing machinery equal in material and workmanship to the highest class of steam engine construction. These compressors are the product of long experience in the design and manufacture of high grade engines, combined with important new improvements in the air-compressing elements of the machine. They are liberally designed, with large bearings and wearing surfaces, rigid frames, effective lubrication, ample valve areas and intercooling capacities, securing compressors which operate with minimum noise and friction and at the highest economy. Owing to the increased efficiency and capacity of these machines they are offered at a price, based on actual capacity, which compares favorably with compressors of inferior design and cheap construction.

TRADE PUBLICATIONS.

"TREATING OF MERCURY AND AMALGAM."—The Traylor Engineering Co., 2 Rector St., New York City. Mailing card No. 11; 6 × 9 ins.

This card contains condensed information. The series is suitable for vertical filing.

VERTICAL GAS ENGINES.—The Lazier Gas Engine Co., 190 Main St., Buffalo. Paper; 7½ × 11 ins.; pp. 12; illustrated.

This pamphlet comes in a stiff mailing case which forms the binding for a set of blue prints showing in complete detail the construction of the Lazier engine. These engines will operate on illuminating, natural, or producer gas, and are made for general power and lighting service.

WELL DRILLS, ETC., AND ACCESSORIES.—The Cyclone Drill Co., Orrville, Ohio. Paper; 3½ × 6 ins.; pp. 28; illustrated.

This pamphlet covers the well-known Cyclone line for prospecting, well drilling, sounding, boring, and blast-hole work.

"POWER PUMPS AND PAPER-MILL MACHINERY."—The Sandusky Foundry & Machine Co., Sandusky, Ohio.

A number of power pumps for various purposes are shown here, and several rolls, screens, etc., used in paper making.

GAS AND GASOLINE ENGINES.—The Jacobson Machine Mfg. Co., Warren, Pa. Bulletin D; paper; 6 × 9 ins.; pp. 20; illustrated.

The Jacobson engines are made for either stationary or portable use. A portable wood-sawing outfit is shown, and also a semi-portable electric-light plant.

"STEAM AND WATER SPECIALTIES."—The Golden-Anderson Valve Specialty Co., Fulton Bldg., Pittsburg. Catalog 10; paper; 5½ × 8 ins.; pp. 56; illustrated.

This is the November catalog of the company. It covers all kinds of globe and angle valves for heavy service, steam traps, etc.

TIN ROOFERS' HANDBOOK.—Compiled by the Joint Committee on Tin Plate for the National Association of Master Sheet Metal Workers of the United States. Paper; 4¼ × 7½ ins.; pp. 23; illustrated.

This pamphlet is "issued in the interests of good tin roofs." Mr. Wm. H. Barnard, 225 Main St., Norfolk, Va., is Secretary of the Association.

ELEVATING, CONVEYING, MINING AND MILLING MACHINERY.—The C. O. Bartlett & Snow Co., Cleveland. Catalog 18 (1908); paper; 6 × 9 ins.; pp. 324; illustrated.

This large catalog covers such a variety of machinery of the sorts mentioned above that detailed comments would be too long. A 12-page index gives ready access to what is wanted.

EXPERT DEVELOPMENT OF BUSINESS AND MANUFACTURING SYSTEMS.—Stephen T. Williams and Staff, 346 Broadway, New York City. Paper; 3½ × 6 ins.; pp. 14.

This pamphlet merely outlines the scope of the services which may be rendered by this organization, which "diagnoses and treats scientifically" such matters as costs, processes, spoilage and waste, departmental organization, etc.

PNEUMATIC TOOLS.—Ingersoll-Rand Co., 11 Broadway, New York City. Pamphlet 2010. Paper; 6 × 9 ins.; pp. 24; illustrated.

This bulletin gives in detail the construction of the "Crown" pneumatic hammers and contains considerable matter on operation, care and replacement parts.

PORTABLE WATTMETER CALIBRATORS.—Fort Wayne Electric Works, Fort Wayne, Ind. Bulletin 1097. Paper; 8 × 10½ ins.; pp. 4; illustrated.

The "calibrator" described in this pamphlet is a carefully made, accurately calibrated, wattmeter of what might be called standard type. Its general construction and recommended use is outlined.

ELECTRIC MOTORS.—B. F. Sturtevant Co., Hyde Park, Mass. Bulletins 144 and 147. Paper; 6½ × 9 ins.; pp. 8, each; illustrated.

These two pamphlets show the general mechanical and electrical construction of 8-pole, 4-pole and bipolar types. Any special features of design are outlined and in each bulletin are tables of general dimensions.

SUCTION GAS PRODUCERS.—Wile Power Gas Co., Rochester, N. Y. Catalog A, 1907. Section III. Paper; 6 × 9¼ ins.; pp. 18; illustrated.

This pamphlet opens with a general discussion of the benefits of deriving power from producer gas plants. This discussion soon narrows down to a consideration of the Wile system of suction gas producers. Typical installations are shown and specifications of the apparatus are appended.

ELECTRIC-MOTOR APPLICATIONS.—Sprague Electric Co., 527 West 34th St., New York City. Bulletins 229, 230 and 231. Paper; 8 × 10½ ins.; pp. 74, 20 and 8; illustrated.

Bulletin 229 is a large, artistic pamphlet in which are described some of the Sprague motors adapted for driving printing, electrotyping, stereotyping and binding machinery. A great number of illustrations show applications that have been made. A long list of prominent establishments, equipped with Sprague motors, is appended.

Bulletin 230 contains a reprint of an article in the "Electrical World" on the applications of Sprague products in the machine shops of the F. Wesel Mfg. Co., Brooklyn, N. Y.

In Bulletin 231, there is described the Sprague direct-current motor equipment for Mergenthaler linotype machines.

CHEMICAL FIRE ENGINES.—The Kanawha Chemical Engine Mfg. Co., Charleston-Kanawha, W. Va. Paper; 9 × 6 ins.; pp. 16; illustrated.

The company's principle is to have compressed air, in a separate cylinder, to force fire-extinguishing chemical solutions from another cylinder. The apparatus is made both portable and for permanent installation in buildings. The portable apparatus is made both for heavy department service and for light hand service.

ARC LAMPS.—Fort Wayne Electric Works, Fort Wayne, Ind. Bulletins 1099 and 1101. Paper; 8 × 10½ ins.

Bulletin 1099 shows the general and detailed design of this concern's direct-current, multiple, enclosed arc lamps, type "D. C. M." Bulletin 1101 describes a multiple system of street arc lighting which has been developed to provide a simple system for small towns and isolated sections, which is adapted to constant potential generating stations.

INCANDESCENT GAS LIGHTING APPARATUS.—The Welsbach Co., Gloucester, N. J. Catalog 10. Paper; 9 × 7 ins.; pp. 56; illustrated. "Reflex" Lamp Catalog; paper; 5 × 8 ins.; pp. 56; illustrated. Bulletin 11; paper; 7¾ × 9¼ ins.; pp. 8; illustrated.

In Catalog 10 all the Welsbach mantels, burners and fittings are described and illustrated, with prices of each bit of apparatus. In the "Reflex" lamp catalog somewhat the same ground is covered for the inverted type lamp, with considerable space given up to wall and ceiling fixtures. The title of Bulletin 11, "Incandescent Gas Lighting Exhibits at Jamestown," indicates the character of the contents.

ROLLER BEARINGS FOR ELECTRIC RAILWAYS.—The Standard Roller Bearing Co., 5003 Lancaster Ave., Philadelphia. Folder; 6 × 9 ins.; pp. 8; illustrated.

The use of these bearings is claimed by the makers to result in a saving of 50% or more in current consumption, or, they state, $292 per car per annum. Curves are shown giving comparative power consumption with and without the roller bearings, and a letter from Prof. W. P. Graham, of the Department of Electrical Engineering at Syracuse University, is given, embodying part of the data from which these curves were plotted. An insert leaf shows a roller-bearing trolley wheel.

WIRE ROPE.—The Macomber & Whyte Rope Co., 266-268 S. Clinton St., Chicago. Catalog E; paper; 3¼ × 5¾ ins.; pp. 72; illustrated.

This company makes the "Kilindo non-rotating" ropes, which they claim to be absolutely free from tendency to rotate with or without the load. The wearing qualities of "Kilindo" ropes are said to be strong, owing to the number of wires exposed at the outer surface. It may be of interest to mining readers, to read the "Useful Information" on pages 66 and 67, in connection with the report of the Transvaal Rope and Safety Catch Commission which we have been publishing.

RIVETS.—The Champion Rivet Co., Cleveland, Ohio. Paper; 6 × 9 ins.; pp. 77; illustrated.

This pamphlet might be regarded as a treatise on riveting. Its full title is "Scientific Facts and Other Valuable Information about Victor Boiler, Structural and Ship Rivets." Twenty-two pages are devoted to an exhaustive report of tests made upon Victor steel rivets—bending, shearing, tensile, etc., and chemical analyses. Nearly twenty pages are given to "pointers" on riveting work; and the last 24 pages contain illustrations of structures, ships, boilers, etc., in which these rivets have been used.

CONCENTRATING TABLE.—The Traylor Engineering Co., 2 Rector St., New York City. Paper; 7 × 10 ins.; pp. 23; illustrated.

The Traylor table has shallow, curved corrugations or riffles, and about 60% of the table at the head end is flat. This enables the saving of much slime (fine mineral) ordinarily lost. It is adjustable in angle for different ores. The pamphlet contains full directions for installing the concentrator. In the back are descriptions and illustrations of associated machinery such as screens, roll and reciprocating crushers, Chilian mills, jigs, etc. Two smelting furnaces are shown—one for silver-lead smelting being made sectional for mule-back transportation.

ELECTRIC DYNAMOMETER.—Sprague Electric Co., 527 West 34th St., New York City. Bulletin 108. Paper; 8 × 10½ ins.; pp. 8; illustrated.

This dynamometer for testing gasolene engines consists of a special direct current generator with compensated fields. The field frame is of cylindrical form carrying on its inner side bolted poles which support in turn the field windings. The entire generator is mounted so as to allow the field frame to oscillate through a limited length of arc. The engine to be tested is set in alined position and coupled to the armature of the dynamometer by a flexible coupling. The torque exerted by the armature is balanced by weights on the oscillating field frame. The HP. developed is easily determined from these weights. The current generated by the electric dynamometer may be utilized as seems best. This dynamometer is built in sizes of 10 to 100 HP.

ELECTRICAL APPARATUS.—General Electric Co., Schenectady, N. Y. Bulletins 4530, 4533, 4534. Paper; 8 × 10 ins.; pp. 11, 7 and 4; illustrated.

"Mercury Arc Rectifiers" is the subject of Bulletin No. 4530. It emphasizes the simplicity of these devices for producing direct current for charging storage batteries, etc. A brief outline of the theory of the apparatus is given and various types of rectifying sets are described and illustrated.

The Wright Demand Indicator described in Bulletin 4533 has been extensively adopted in determining load factor, the maximum output of generators, transformers, feeders, etc., and the demands of individual customers. It consists of a small differential thermometer, having one of its bulbs surrounded by a heating band carrying all, or a definite shunted part, of the total current. The expansion of air in this bulb forces the liquid in the "U" tube of the differential thermometer into the opposite leg and causes it to overflow into a central or index tube connected to the upper end of the "U." The height of the liquid in the index tube is read on the indicator scale and marks the maximum demand of the circuit. Capacities, prices, dimensions, diagrams, scales, etc., are included in the bulletin.

In Bulletin 4534 the horizontal shaft type steam turbine sets up to 300 KW. capacity, both direct current and alternating current, are described. Arrangements for operation either non-condensing or condensing are shown. Those built for condensing service are suitable for non-condensing work in case of necessity. The construction of generators with commutating poles and other necessary special features are shown in the pamphlet.

For other Proposal Advertisements see pages 59, 60, 61, 62, 63, 64, 65, 66 of Advertisements and Construction News page 178.

HIGH LEVEL INTERCEPTING SEWER.

READVERTISEMENT.

Sealed bids will be received by the Board of Public Service of the City of Springfield, State of Ohio, until 12 o'clock, noon, of Wednesday, December 18, 1907, at the office of the Clerk of said Board, Room 5, City Building, for furnishing the necessary labor and material for the construction of that portion of the High Level Intercepting Sewer lying in Main Street between Walter Street and Western Avenue, in Western Avenue between Main and Columbia Streets, in Columbia Street between Western Avenue and Light Street, in Light Street between Columbia and North Streets, in North Street between Light and Factory Streets, in Factory Street between North and Main Streets, on the following approximate quantities:

2,096 feet 24-inch vitrified pipe, plain or reinforced concrete sewer.
5,554 feet 30-inch vitrified pipe, plain or reinforced concrete sewer.
2,166 feet 33-inch vitrified pipe, plain or reinforced concrete sewer.
9,376 feet 6-inch pipe house connections, average depth 10 feet.
71 6-inch on 24-inch Y branches.
158 6-inch on 30-inch Y branches.
64 6-inch on 33-inch Y branches.
800 feet 8-inch sanitary sewer.
50 feet 18-inch sanitary sewer.
10 feet 30-inch sanitary sewer.
32 round manholes, 4 ft. inside diameter, average depth 12 feet.
8 single drop manholes.
1 double drop manhole.
1 regulator as per plan.
41 manhole covers and frames.
475 manhole steps.
115 cubic yards Class A concrete.
17,875 cubic yards rock excavation.

Each bid must contain the full name of every person or company interested in the same, and be accompanied by bond in the sum of $5,000.00 with sureties to the approval of the Board, or a certified check upon some solvent bank, in like amount, as a guarantee that if the bid is accepted a contract will be entered and its performance properly secured.

Bidders to use printed forms to be furnished upon application.

The right reserved to reject any and all bids.

Envelope or wrapper containing bid to be endorsed "Bid for High Level Intercepting Sewer."

By order of the Board of Public Service.

F. A. CROSS, Clerk.

W. H. SIEVERLING,
City Engineer. 22-2t

TREASURY DEPARTMENT, Office of Supervising Architect, Washington, D. C., November 23, 1907.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 21st day of December, 1907, and then opened for installation of plumbing, gas-piping, etc., in extension to U. S. Post Office and Court House, Fort Worth, Texas, in accordance with drawings and specification, copies of which may be had at the office or at the office of the Custodian at Fort Worth, Texas, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 22-2t

Situations Open

DRAFTSMAN.—Position with bright future open for young man of exceptional ability; experienced in thermodynamics, theory of heat, and apparatus construction. Magnificent opportunity for right person, but small pay at start. Technical graduate preferred. State salary, experience and all details. Address "P. B. 22," Engineering News, New York. 22-1t

Situations Wanted

MECHANICAL ENGINEER, 15 years' experience on power plants, mill building construction, paper mill, blast furnace, reinforced concrete work, general machinery, and concentrating plants; capable as chief draftsman, superintendent, chief engineer. A1 references. Address "R. B. 22," Engineering News, New York. 22-4t

ENGINEER, graduate highest engineering school of Paris, France, thoroughly experienced in cement manufacturing, able to make designs and erection of plant, and to take superintendence afterwards; also thorough experience in reinforced concrete designs and construction; best references from authorities in cement manufacturing; wants position according to abilities. Address "D. A. 22," Engineering News, New York. 22-1t

Miscellaneous Wants

SEWAGE DISPOSAL CO., INC., desires association of engineer or contractor who can invest $10,000 for purpose of taking up municipal contract work, etc. Address "K. 16," Engineering News, New York. 22-2t

ELECTRICAL ENGINEER, prepared to invest about $10,000 in sound, going business, desires active position; references exchanged. Address "R. A. 22," Engineering News, New York. 22-1t

Engineering-Contracting Co., Inc.

located in the South, with branch office in New York, and having profitable contracts on hand and a large plant, desires to secure additional capital in order to extend field of operation. Close investigation invited. Good opportunity for engineer with some capital. Address "S. B. 22," Engineering News, New York. 22-1t

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